

The Current Situation of Disasters and Disaster Nursing Education in Asian Universities

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I. Introduction

A. Background of research

The 2005 World Conference on Disaster Reduction (WCDR) adopted the "Hyogo Framework for Action (HFA) 2005 - 2015" with the goal of "Building the Resilience of Nations and Communities against Disasters". One of the important measures that were proposed was to promote a system of self-help and mutual assistance among multiple disaster countries, in other words, to achieve human resource development of organizations and aid agencies of multiple disaster countries in accordance with the culture of each, which leads to the strengthening of relief organizations in the country itself.

Insufficiency of a systematic knowledge of disaster nursing as well as an international and general lack of a sufficient development of knowledge system of nursing during a disaster was triggered in 1995 in Japan when unprecedented disasters occurred, such as the sarin gas attack on the Tokyo subway system and the Great Hanshin-Awaji Earthquake; this despite the previous accumulation of wide-ranging research and practices. (Sakurai, 2011). The urgent issue is to develop content and methods of "disaster nursing" education that focused on nurses, midwives, and public health nurses who play an important role of aid in multiple disaster countries, aid that is appropriate for the culture and customs of the country while based on the characteristics of the community and victims of the country. For basic nursing education in Japan, education in disaster nursing was first explicitly stated in the public health, midwife, nursery school nurses rules that were revised in FY 2009. There the considerations of education in an integrated field, which was installed in order to strengthen, nursing practice ability, were "content to understand the basic knowledge of nursing that can be of significant assistance immediately following the occurrence of a disaster." With this as a focal point, the need to enrich disaster nursing education was hammered out. The contents of disaster nursing was also incorporated into the 2010 public health nurse and midwife test questions, so it can be said that we are now at the stage for systematic education being gradually implemented.

In addition, the high number in incidence of natural disasters is not limited to Japan, but also in many Asian countries, this compared to other parts of the world, and the need to develop educational content and methods of disaster nursing education has been advocated (Yamamoto, 2006). However, according to the survey on implementation and status of disaster nursing education in the College of Nursing of 11 Asian countries conducted in 2007 (Miura, Ohara, Ito, et al, 2009), 47.1% (24 people) completed less than one year of disaster nursing education, and 23.5% (12 persons) completed 1-5 years or less, which made it clear that they are just beginning to work on such education, this when it was said to be the time when educational content and methods of disaster nursing is required to be further developed. Five years have passed since this study; what now is the status of the nursing colleges of Asia with regards to the content and methods for disaster nursing education?

Based on the above, in this study, we would like to clarify the current situation on disaster nursing education in Asia and to examine the challenges to implementing disaster nursing education.

B. Purpose of research

To clarify the content of disaster nursing education, the current situation in nursing universities in Asian countries, and examine all relevant issues.

C. Significance of the study

The study will explicate existing content, method, and issues with regard to disaster and disaster nursing in nursing universities in Japan and other Asian countries, affording us the basic data to develop "disaster nursing" educational content and methods that are well-matched to the unique characteristics of the victims and communities of disaster-stricken countries. In addition, the study will make it possible to obtain input in forming a base for international disaster nursing research and educational training.

II. Method

A. Study design

Study design was a quantitative descriptive study by self-administered questionnaire, and was conducted as field survey research.

B. Objective of investigation

1. Countries surveyed and sampling

Study scope were the Asian countries as well as the countries that are listed on the website of the Ministry of Foreign Affairs Regional Index (Asia) section.

One person per university, familiar with the disaster nursing education of the school or disaster nursing education person responsible and who completed a year at the time of the survey in January 2013, was selected. The survey was mailed to the president, dean, or department chair for each university and was asked to either answer the survey themselves or to forward it to whom they think can answer those questions. For nursing programs in Japanese universities, we utilized the "(Certified) medical technician training school list designated by the Minister of Education, Culture, Sports, Science and Technology" published in the homepage of the Ministry of Education, Culture, Sports, Science and Technology (<http://www.mext.go.jp/component/>)

For nursing universities in Asia outside of Japan, we referred to the "International Handbook of Universities 2011" to select all universities that included in their department names: "Nursing", "Health Sciences and Nursing," "Nursing and Midwifery", etc. However, for the Philippines, we selected 50 schools from 417 schools that are doing disaster-nursing education with the selection based on information from the Philippine National Red Cross nursing department.

2. Number of sample

The sample size totaled 164 schools for nursing universities in Japan and 256 schools for nursing universities in Asia other than Japan. The distribution and numbers of nursing universities in Asia other than Japan are as shown in Table 1.

Table 1 Distribution and number of nursing universities in Asia other than Japan

Country	Distribution number	Country	Distribution number	Country	Distribution number
Philippines	50	India	22	Bangladesh	2
Indonesia	49	Taiwan	14	Cambodia	2
China	48	Malaysia	8	Myanmar	1
Rep. of Korea	27	Vietnam	4	Singapore	1
Thailand	24	Pakistan	3	Nepal	1

C. Survey method

1. Survey period

February-April, 2013

2. Data collection method

A self-administered questionnaire was sent by e-mail or mail. Respondents returned their questionnaires either by e-mail or surface mail. We prepared a questionnaire in Japanese for Japanese respondents and another in English for respondents outside of Japan.

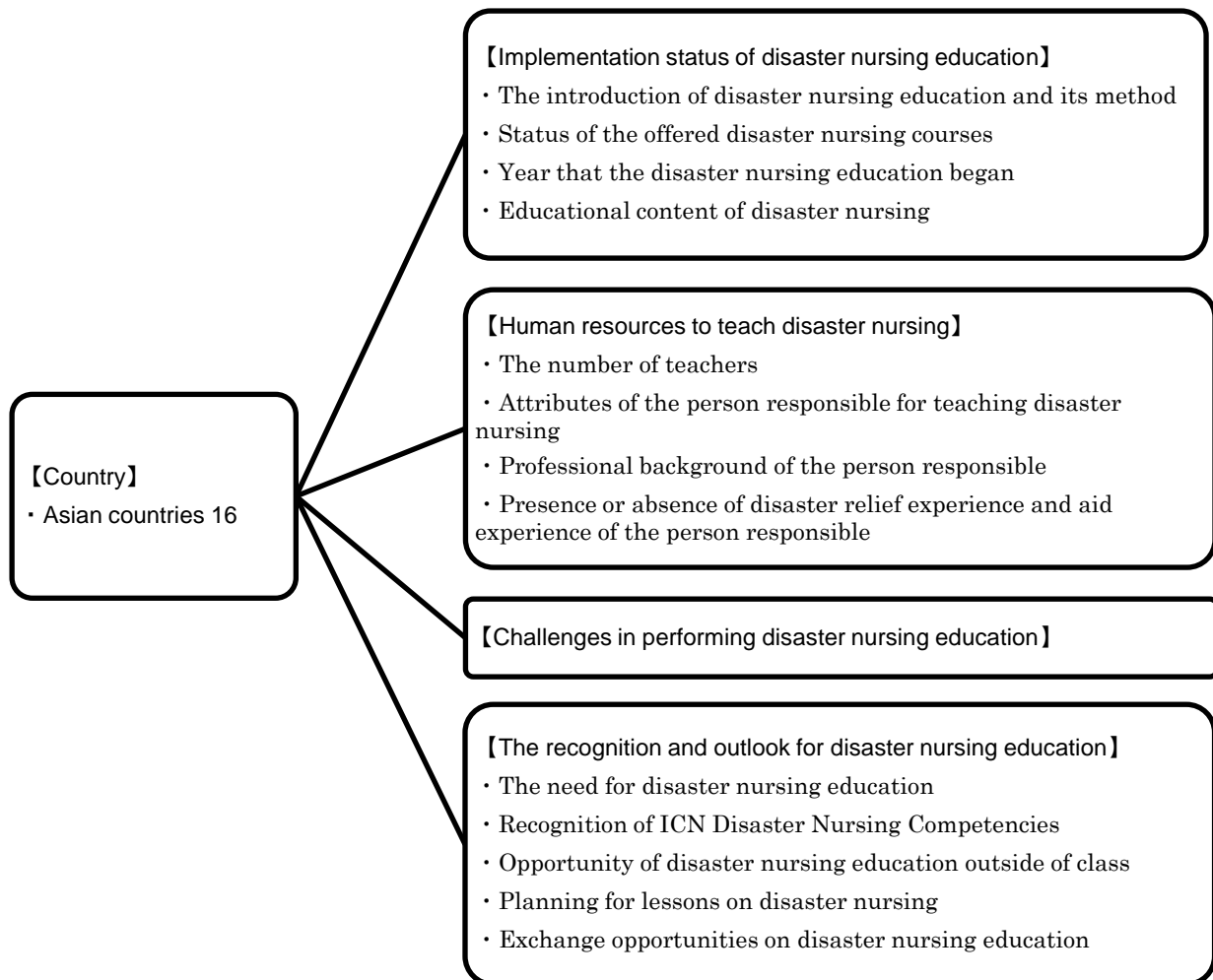
Documents sent were a request for cooperation and explanation of research (Appendix 1) and the questionnaire (Document 2). Each recipient was the head of a nursing college (president, dean, department

chair). We requested their cooperation in our research and in the distribution of the questionnaire to the appropriate person at each facility. We also stated that the answered questionnaire can be returned by mail using an enclosed return envelope or by uploading the questionnaire on the web to email back to us. Consent to participation in the survey was assumed with the return of the completed survey.

3. Content of Survey

Figure 1 shows the framework of the survey. Based on the framework of the survey, survey content was substantiated. For educational content of disaster nursing, the following were analyzed: textbooks used in Japan (The International Nursing Association Disaster Nursing Training Steering Committee, 1999; Yuko Minami and Aiko Yamamoto, 2007; Mariko Ohara, editor, 2008; Hiroshi Nonaka, 2008; Akiko Sakai and Shizuko Kikuchi, 2008; The Japanese Red Cross Society Department of Nursing, 2012; Mariko Ohara and Akiko Sakai, editor, 2012), and overseas textbooks (Powers, R. & Daily E., 2000; Veenema, TG, 2003; Veenema, TG, 2006; Adelman, DS and Legg, the TJ, 2009).

Figure 1 Framework of the survey



4. Data analysis methods

Data are the calculated descriptive statistics for each item utilizing Excel and SPSS.

D. Ethical considerations

1. Considerations for research in general

The present study was carried out after obtaining the approval of the Japanese Red Cross College of Nursing Research Ethics Review Board (No.2012-89).

2. Consent to research

In the document requesting cooperation in and the description of the research (Appendix 1), and the questionnaire (Appendix 2), it is stated that: research participation is voluntary; that is not subject to penalty even if one does not agree to participate; and the returning of the questionnaire will be considered as consent.

3. About facility information and personal information

Only researchers were to use the roster of the facilities (facility name, zip code, address) that was extracted for the purpose of sending the questionnaire and, at the end of the study, the information will be destroyed. With regard to response data, statistical processing will be performed for all of them and an anonymous ID number was given to all open-responses so that individuals and facilities could not be specified and would be processed in anonymity. Data entry was entrusted to part-time workers, but the need for privacy and protection of personal information was explained to the part-time workers by the research leader, and they agreed to the terms that the entered data never be taken from the laboratory. Participants who wished to participate in the network construction were asked to include their contact information; however, in the questionnaire, we stated that we do not use that information for purposes other than notification of the participation and networking opportunities for exchange, and that the contact information need not be included if one did not wish to participate. This personal information was also strictly controlled in the laboratory.

4. Considerations for answering the Web questionnaire

If the questionnaire was downloaded on the Web and returned to the specified e-mail address, there was the possibility that one can identify the university of the sender and the identity of the sender (which can be seen in the subject column), however, the researcher only saved and print out the questionnaire; identifiable personal information or university (e-mail itself or e-mail address) were immediately deleted so that individual universities and the subject would remain anonymous. That point was clearly noted on the cover of the questionnaire and request document and was also similarly stated in the introductory portion of the Web version.

III. Result

A. Collection situation

The collected number was 89 schools, which was a response rate of 21.1%. There were responses from 10 countries, including Japan. The collected number was 56 schools in Japan, and the response rate was 34.1%. The collected number from universities in Asia outside of Japan (hereinafter, Asia) was 33 schools, and the response rate was 12.9%. Response number and rate are shown in Table 2.

Table 2 National response rate and response rate

Country	The collected number (Response rate %)	Country	The collected number (Response rate %)	Country	The collected number (Response rate %)	Country	The collected number (Response rate %)
Bangladesh	0 0	Indonesia	8 16.3	Myanmar	0 0	Singapore	0 0
Cambodia	1 50	Japan	56 34.1	Nepal	0 0	Taiwan	1 7.1
China	1 2.8	Rep. of Korea	1 3.7	Pakistan	0 0	Thailand	7 29.2
India	4 18.2	Malaysia	3 37.5	Philippines	7 14	Vietnam	0 0

B. Implementation status of disaster nursing education

1. The introduction of disaster nursing education and its methods

Table 3-1 shows where and how much disaster nursing education is incorporated into school curricula: 48 schools in Japan (85.7%), answered that it is incorporated, and in Asia, 30 schools (90.9%).

Table 3-1 Do you incorporate the lessons of disaster nursing

	Yes		No		Total	
Japan	48	85.7%	8	14.3%	56	100.0%
Asia	30	90.9%	3	9.1%	33	100.0%
Cambodia	1	100.0%	0	0.0%	1	100.0%
China	1	100.0%	0	0.0%	1	100.0%
India	4	100.0%	0	0.0%	4	100.0%
Indonesia	7	87.5%	1	12.5%	8	100.0%
Rep. of Korea	1	100.0%	0	0.0%	1	100.0%
Malaysia	3	100.0%	0	0.0%	3	100.0%
Philippines	6	85.7%	1	14.3%	7	100.0%
Taiwan	1	100.0%	0	0.0%	1	100.0%
Thailand	6	85.7%	1	14.3%	7	100.0%
Total	78	87.6%	11	12.4%	89	100.0%

Table 3-2 shows how disaster nursing is incorporated into the class. The response to ‘it is an independent subject’ is 26 schools (54.2%) in Japan, and 8 schools Asia (24.2%); the response to ‘it has been incorporated into other subjects’ was 21 schools (43.8%) in Japan, and 21 schools in Asia (63.6%).

Table 3-2 Method of introducing Disaster Nursing to the class

	Independent subject		We incorporated it into other subjects		No answer		Total	
Japan	26	54.2%	21	43.8%	1	2.1%	48	100.0%
Asia	8	24.2%	21	63.6%	1	3.3%	30	100.0%
Cambodia	1	100.0%	0	0.0%	0	0.0%	1	100.0%
China	1	100.0%	0	0.0%	0	0.0%	1	100.0%
India	0	0.0%	4	100.0%	0	0.0%	4	100.0%
Indonesia	2	28.6%	5	71.4%	0	0.0%	7	100.0%
Rep. of Korea	1	100.0%	0	0.0%	0	0.0%	1	100.0%
Malaysia	0	0.0%	3	100.0%	0	0.0%	3	100.0%
Philippines	2	33.3%	4	66.7%	0	0.0%	6	100.0%
Taiwan	0	0.0%	1	100.0%	0	0.0%	1	100.0%
Thailand	1	16.7%	4	66.7%	1	16.7%	6	100.0%
Total	34	43.6%	42	53.8%	2	2.6%	78	100.0%

2. Status of offered disaster nursing courses

For the status of offered disaster nursing courses, it was decided that each school could answer up to 5 subjects at the maximum. Table 4-1 shows their answers.

Table 4-1 Answers regarding ‘how many disaster nursing courses are offered’

	Japan	Asia
Answers 1 subject	45 Schools	25 Schools
Answers 2 subjects	18 Schools	8 Schools
Answers 3 subjects	6 Schools	4 Schools
Answers 4 subjects	5 Schools	2 Schools
Answers 5 subjects	1 School	2 Schools

(1) Target grade

Table 4-2 shows the target grade of disaster nursing courses. In Japan, 6 subjects (8.3%) in the first year, 8 subjects (11.1%) in the second year, 25 subjects (34.7%) in the third year, and 33 subjects (45.8%) in the fourth year, which indicated the decided tendency of an increase for the upper grades. In Asia, 4 subjects (22.2%) in the first year, 4 subjects (22.2%) in the second year, 6 subjects (33.3%) in the third-year, 4 subjects (22.2%) in the fourth year, which showed that the courses are offered at about the same rate in each grade level.

Table 4-2 Target grade of disaster nursing courses

	Japan		Asia	
1 st year	6	8.3%	4	22.2%
2 nd year	8	11.1%	4	22.2%
3 rd year	25	34.7%	6	33.3%
4 th year	33	45.8%	4	22.2%
Total	72	100.0%	18	100.0%

(2) The number of credits of disaster nursing courses

Table 4-3 shows the number of credits of disaster nursing courses. In Japan, 43 subjects is one credit (58.9%), followed by 28 subjects of 2 credits (38.4%). In Asia 10 subjects are 2 credits (55.6%), followed by 6 courses of 1 credit (21.4%).

Table 4-3 The number of credits of disaster nursing courses

	Japan		Asia	
1 credit	43	58.9%	6	21.4%
2 credits	28	38.4%	10	35.7%
3 credits	1	11.4%	4	14.3%
4 credits	1	1.4%	3	10.7%
6 credits	0	0.0%	1	3.6%
9 credits	0	0.0%	1	3.6%
11credits	0	0.0%	2	7.1%
14credits	0	0.0%	1	3.6%
Total	73	100.0%	28	100.0%

(3) Positioning of disaster nursing courses

Table 4-4 shows the positioning of disaster nursing courses: 50 subjects (66.7%) is as a compulsory subject; 25 subjects (33.3%) were positioned as elective in Japan; in Asia 37 subjects (94.9%) is a compulsory subject; two subjects (5.1%) were positioned as elective.

Table 4-4 Positioning of disaster nursing courses

	Japan		Asia	
Compulsory subject	50	66.7%	37	94.9%
Elective	25	33.3%	2	5.1%
Total	75	100.0%	39	100.0%

(4) Class format of disaster nursing courses

Table 4-5 shows class formats of disaster nursing courses. In Japan, 41 subjects (59.4%) were offered as a lecture, 24 subjects (34.8%) were offered as exercises, and 4 subjects (5.8%) were offered as practical training. In Asia, 26 subjects (60.5%) were lectures, 17 subjects (39.5%) were practical training, and there were no answers that it was offered as an exercise.

Table 4-5 Class format of disaster nursing courses

	Japan		Asia	
Lecture	41	59.4%	26	60.5%
Exercise	24	34.8%	0	0.0%
Practical Training	4	5.8%	17	39.5%
Total	69	100.0%	43	100.0%

3. The start year for disaster nursing education

Table 5 shows the start year for disaster nursing education. 2005-2009 had the most with 21 schools, (43.8%), and in 2012 – 2010, there were 10 schools (20.8%). The same is true for Asia, 2005-2009 had the highest amount with 9 schools (30.0%), and in 2012 – 2010, there were 8 schools (26.7%). Japan and Asia combined, following the year 2000, marked the highest with 59 schools (75.6%).

Table 5 The start year for disaster nursing education

	Japan	Asia	Cambodia	China	India	Indonesia	Rep. of Korea	Malaysia	Philippines	Taiwan	Thailand	Total
Before 1989	0 0.0%	2 6.7%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	2 33.3%	0 0.0%	0 0.0%	2 2.6%
1990–1994	0 0.0%	2 6.7%	0 0.0%	0 0.0%	1 25.0%	0 0.0%	0 0.0%	0 0.0%	1 16.7%	0 0.0%	0 0.0%	2 2.6%
1995–1999	3 6.3%	3 10.0%	0 0.0%	0 0.0%	1 25.0%	0 0.0%	1 100.0%	0 0.0%	0 0.0%	0 0.0%	1 16.7%	6 7.7%
2000–2004	8 16.7%	3 10.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 16.7%	1 100.0%	1 16.7%	11 14.1%
2005–2009	21 43.8%	9 30.0%	1 100.0%	0 100.0%	1 25.0%	3 42.9%	0 0.0%	1 33.3%	2 33.3%	0 0.0%	1 16.7%	30 38.5%
2010–2012	10 20.8%	8 26.7%	0 0.0%	1 100.0%	0 0.0%	4 57.1%	0 0.0%	2 66.7%	0 0.0%	0 0.0%	1 16.7%	18 23.1%
Unknown	6 12.5%	3 10.0%	0 0.0%	0 0.0%	1 25.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	2 33.3%	9 11.5%
Total	48 100.0%	30 100.0%	1 100.0%	1 100.0%	4 100.0%	7 100.0%	1 100.0%	3 100.0%	6 100.0%	1 100.0%	6 100.0%	78 100.0%

4. Educational content of Disaster Nursing

(1) Basic knowledge related to disaster nursing

Table 6-1 shows educational content that includes basic knowledge related to disaster nursing. "Cycle of Disaster" and "The Role of Disaster Nursing" are the highest with 43 schools (89.6%), followed by "Definition and history of the disaster, the type and disease structure by type" 42 schools (87.5%), "Medical care and disaster nursing defined" with 41 schools (85.4%). On the other hand, in Asia "Defining and history of the disaster, the type and disease structure by type" had the highest amount with 25 schools (75.8%), followed by "The Role of Disaster Nursing" with 24 schools (72.2%), "Disaster Management" was 23 schools (69.7%).

Table 6-1 Educational content that includes basic knowledge related to disaster education

	Japan N=48	Asia N=30	Cambodia	China	India	Indonesia	Rep. of Korea	Malaysia	Philippines	Taiwan	Thailand	Total N=78
definition and history of disaster, disease structure by type of disaster	42 87.5%	25 75.8%	0 0.0%	1 100.0%	3 75.0%	7 100.0%	1 100.0%	2 66.7%	5 83.3%	1 100.0%	5 83.3%	67 85.9%
Cycle of disaster	43 89.6%	19 57.6%	0 0.0%	0 0.0%	3 75.0%	7 100.0%	1 100.0%	1 33.3%	4 66.7%	0 0.0%	3 50.0%	62 79.5%
Disaster management	28 58.3%	23 69.7%	0 0.0%	0 0.0%	4 100.0%	7 100.0%	1 100.0%	1 33.3%	5 83.3%	1 100.0%	4 66.7%	51 65.4%
Information gathering during disaster	30 62.5%	15 45.5%	0 0.0%	0 0.0%	3 75.0%	6 85.7%	0 0.0%	0 0.0%	4 66.7%	0 0.0%	2 33.3%	45 57.7%
Laws and regulations regarding disaster	36 75.0%	17 51.5%	0 0.0%	1 100.0%	3 75.0%	6 85.7%	1 100.0%	0 0.0%	5 83.3%	0 0.0%	1 16.7%	53 67.9%
National policy on disaster prevention, mitigation, preparedness	29 60.4%	19 57.6%	0 0.0%	1 100.0%	3 75.0%	6 85.7%	1 100.0%	2 66.7%	3 50.0%	0 0.0%	3 50.0%	48 61.5%
Ethics and disaster	18 37.5%	12 36.4%	0 0.0%	1 100.0%	2 50.0%	3 42.9%	0 0.0%	1 33.3%	4 66.7%	0 0.0%	1 16.7%	30 38.5%
Evaluation and assessment of different cultures in disaster	14 29.2%	9 27.3%	0 0.0%	0 0.0%	1 25.0%	3 42.9%	1 100.0%	0 0.0%	3 50.0%	0 0.0%	1 16.7%	23 29.5%
Gender Issues	12 25.0%	6 18.2%	0 0.0%	0 0.0%	1 25.0%	2 28.6%	0 0.0%	0 0.0%	3 50.0%	0 0.0%	0 0.0%	18 23.1%
Volunteering in disaster affected areas	28 58.3%	7 21.2%	0 0.0%	0 0.0%	1 25.0%	2 28.6%	1 100.0%	0 0.0%	3 50.0%	0 0.0%	0 0.0%	35 44.9%
Medical care and disaster nursing defined	41 85.4%	19 57.6%	0 0.0%	1 100.0%	2 50.0%	6 85.7%	1 100.0%	0 0.0%	4 66.7%	1 100.0%	4 66.7%	60 76.9%
Definitions and types of vulnerable group	38 79.2%	13 39.4%	0 0.0%	0 0.0%	3 75.0%	6 85.7%	0 0.0%	0 0.0%	3 50.0%	0 0.0%	1 16.7%	51 65.4%
Role of Disaster Nursing	43 89.6%	24 72.7%	0 0.0%	1 100.0%	4 100.0%	6 85.7%	1 100.0%	2 66.7%	5 83.3%	1 100.0%	4 66.7%	67 85.9%

(2) Disaster- based Care

As nursing by function, Table 6-2 shows the educational content that is included in the disaster nursing training. In Japan "natural disasters" was the highest amount with 42 schools (87.5%), and "man-made disaster" with 27 schools (56.3%), the "NBC disaster: radioactivity disaster, biological disaster and chemical disaster" with 24 schools (50.0%), 16 schools with "terrorism" (33.3%). In Asia "Natural disaster" was also the most used with 22 schools (66.7%), the "man-made disaster" with 20 schools (60.6%), the "NBC disaster: radioactivity disaster, biological disaster and chemical disaster" with 18 schools (54.5%) and "Terrorism" with 12 schools (36.4%).

Table 6-2 Educational content that is included as disaster based care

	Japan N=48	Asia N=30	Cambodia	China	India	Indonesia	Rep. of Korea	Malaysia	Philippines	Taiwan	Thailand	Total N=78
Natural disasters	42 87.5%	22 66.7%	0 0.0%	1 100.0%	3 75.0%	7 100.0%	1 100.0%	2 66.7%	4 66.7%	0 0.0%	4 66.7%	64 82.1%
Man-made disaster (airplane accident, train accident)	27 56.3%	20 60.6%	0 0.0%	1 100.0%	3 75.0%	4 57.1%	1 100.0%	3 100.0%	4 66.7%	0 0.0%	4 66.7%	47 60.3%
NBC (Nuclear, Biological, Chemical) disaster	24 50.0%	18 54.5%	1 100.0%	1 100.0%	3 75.0%	4 57.1%	1 100.0%	1 33.3%	4 66.7%	1 100.0%	2 33.3%	42 53.8%
Terrorism	16 33.3%	12 36.4%	0 0.0%	1 100.0%	2 50.0%	2 28.6%	1 100.0%	1 33.3%	4 66.7%	0 0.0%	1 16.7%	28 35.9%

(3) Theory and research of disaster nursing

Table 6-3 shows if theory and research of disaster nursing is included in the curriculum or not. In Japan, 9 schools (18.8%) answered that they did, and in Asia 8 schools (24.2%) answered that they did.

Table 6-3 Theory and research of disaster nursing is included in the curriculum

	Japan N=48	Asia N=30	Cambodia	China	India	Indonesia	Rep. of Korea	Malaysia	Philippines	Taiwan	Thailand	Total N=78
Theory and research of disaster nursing,	9 18.8%	8 24.2%	0 0.0%	0 0.0%	1 25.0%	3 42.9%	0 0.0%	0 0.0%	2 33.3%	0 0.0%	2 33.3%	17 21.8%

(4) Psychological and mental care during disasters

Table 6-4 shows educational content regarding psychological and mental care during disasters. In Japan, " Basics of psychological and social care for victims " had the most with 41 schools, (85.4%); "Care and stress management for relief effort staff " with 39 schools (81.3%); and " Coordination with psychiatrists " with 27 schools (56.3%). In Asia, "Basics of psychological and social care for victims " had the highest number of 16 schools (48.5%); " Psychological triage " with 14 schools (42.4%), and " Care and stress management for relief effort staff " was with 13 schools (39.4%).

Table 6-4 Educational content regarding psychological and mental care during disasters

	Japan N=48	Asia N=30	Cambodia	China	India	Indonesia	Rep. of Korea	Malaysia	Philippine s	Taiwan	Thailand	Total N=78
Basics of psychological and social care for victims	41 85.4%	16 48.5%	0 0.0%	1 100.0%	2 50.0%	5 71.4%	1 100.0%	1 33.3%	3 50.0%	1 100.0%	2 33.3%	57 73.1%
Psychological triage	24 50.0%	14 42.4%	1 100.0%	1 100.0%	1 25.0%	5 71.4%	1 100.0%	1 33.3%	3 50.0%	0 0.0%	1 16.7%	38 48.7%
Coordination with psychiatrists	27 56.3%	6 18.2%	0 0.0%	0 0.0%	0 0.0%	4 57.1%	0 0.0%	0 0.0%	2 33.3%	0 0.0%	0 0.0%	33 42.3%
Psychological care for children	22 45.8%	10 30.3%	0 0.0%	0 0.0%	1 25.0%	4 57.1%	1 100.0%	1 33.3%	2 33.3%	0 0.0%	1 16.7%	32 41.0%
Psychological care for elderly	22 45.8%	10 30.3%	0 0.0%	0 0.0%	1 25.0%	4 57.1%	1 100.0%	1 33.3%	2 33.3%	0 0.0%	1 16.7%	32 41.0%
Care and stress management for relief effort staff	39 81.3%	13 39.4%	0 0.0%	1 100.0%	2 50.0%	4 57.1%	1 100.0%	0 0.0%	4 66.7%	0 0.0%	1 16.7%	52 66.7%

(5) Specific care for each vulnerable groups

Table 6-5 shows education focus specific care for each vulnerable groups during a disaster. In Japan, "person with a chronically ill " was the highest with 26 schools (54.2%); "elderly" was 24 schools (50.0%). In Asia, the "children", the "elderly" was the highest in 11 schools (33.3%), "Minorities" was lowest with 8 schools (16.7%) in Japan, and in Asia with 6 schools (18.2%).

Table 6-5 Educational focus specific care for each vulnerable groups during a disaster.

	Japan N=48	Asia N=30	Cambodia	China	India	Indonesia	Rep. of Korea	Malaysia	Philippines	Taiwan	Thailand	Total N=78
Children	21 43.8%	11 33.3%	0 0.0%	0 0.0%	1 25.0%	5 71.4%	0 0.0%	0 0.0%	4 66.7%	0 0.0%	1 16.7%	32 41.0%
Pregnant women and woman in child care	20 41.7%	10 30.3%	0 0.0%	0 0.0%	1 25.0%	5 71.4%	0 0.0%	0 0.0%	3 50.0%	0 0.0%	1 16.7%	30 38.5%
Elderly	24 50.0%	11 33.3%	0 0.0%	0 0.0%	2 50.0%	4 57.1%	0 0.0%	0 0.0%	4 66.7%	0 0.0%	1 16.7%	35 44.9%
Person with a chronically ill	26 54.2%	10 30.3%	0 0.0%	0 0.0%	2 50.0%	3 42.9%	0 0.0%	0 0.0%	3 50.0%	0 0.0%	2 33.3%	36 46.2%
Physically handicapped	19 39.6%	9 27.3%	0 0.0%	0 0.0%	2 50.0%	3 42.9%	0 0.0%	0 0.0%	3 50.0%	0 0.0%	1 16.7%	28 35.9%
Personality disorder patients	19 39.6%	8 24.2%	0 0.0%	0 0.0%	1 25.0%	4 57.1%	0 0.0%	0 0.0%	2 33.3%	0 0.0%	1 16.7%	27 34.6%
mentally handicapped	11 22.9%	8 24.2%	0 0.0%	0 0.0%	1 25.0%	4 57.1%	0 0.0%	0 0.0%	2 33.3%	0 0.0%	1 16.7%	19 24.4%
Minorities	8 16.7%	6 18.2%	0 0.0%	0 0.0%	2 50.0%	3 42.9%	0 0.0%	0 0.0%	1 16.7%	0 0.0%	0 0.0%	14 17.9%

(6) Types of Disaster Nursing seen in different disaster cycles: Silent phase

Table 6-6 shows the educational materials for silent phase (prevention/ preparation): types of Disaster

Nursing seen in different disaster cycles. In Japan the material most utilized was "basic disaster prevention measures (self-help, mutual help, public help)" with 38 schools (79.2%), followed by both " education and training for disaster prevention" and " safety confirmation and evacuation behavior " with 32 schools (66.7%), and "Coordination with other professions " with 31 schools (64.6%). In Asia, the "community assessment" and "Community disaster management" was the most with 17 schools (51.5%), and "hospital disaster prevention," "education and training for disaster prevention," "disaster nursing education," " Coordination with other professions " was 15 schools (45.5%).

Table 6-6 Educational materials for silent phase : types of Disaster Nursing seen in different disaster cycles

	Japan N=48	Asia N=30	Cambodia	China	India	Indonesia	Rep. of Korea	Malaysia	Philippines	Taiwan	Thailand	Total N=78
Hazard map	29 60.4%	11 33.3%	0 0.0%	1 100.0%	1 25.0%	4 57.1%	1 100.0%	0 0.0%	2 33.3%	1 100.0%	1 16.7%	40 51.3%
Safety confirmation and evacuation behavior	32 66.7%	11 33.3%	0 0.0%	0 0.0%	1 25.0%	4 57.1%	1 100.0%	1 33.3%	3 50.0%	0 0.0%	1 16.7%	43 55.1%
Community assessment	25 52.1%	17 51.5%	0 0.0%	1 100.0%	2 50.0%	5 71.4%	1 100.0%	1 33.3%	3 50.0%	0 0.0%	4 66.7%	42 53.8%
Warning system	13 27.1%	13 39.4%	0 0.0%	1 100.0%	1 25.0%	4 57.1%	1 100.0%	1 33.3%	3 50.0%	0 0.0%	2 33.3%	26 33.3%
Basic disaster prevention measures (self-help, mutual help, public-help)	38 79.2%	12 36.4%	0 0.0%	1 100.0%	2 50.0%	3 42.9%	1 100.0%	0 0.0%	3 50.0%	0 0.0%	2 33.3%	50 64.1%
Community disaster management	30 62.5%	17 51.5%	0 0.0%	0 0.0%	3 75.0%	5 71.4%	1 100.0%	1 33.3%	3 50.0%	0 0.0%	4 66.7%	47 60.3%
Hospital disaster prevention	27 56.3%	15 45.5%	0 0.0%	0 0.0%	2 50.0%	5 71.4%	1 100.0%	1 33.3%	3 50.0%	0 0.0%	3 50.0%	42 53.8%
Handbook for disaster prevention	29 60.4%	6 18.2%	0 0.0%	0 0.0%	1 25.0%	3 42.9%	0 0.0%	0 0.0%	2 33.3%	0 0.0%	0 0.0%	35 44.9%
Education and training for disaster prevention	32 66.7%	15 45.5%	0 0.0%	1 100.0%	2 50.0%	5 71.4%	1 100.0%	0 0.0%	4 66.7%	0 0.0%	2 33.3%	47 60.3%
Disaster nursing education	18 37.5%	15 45.5%	0 0.0%	0 0.0%	3 75.0%	5 71.4%	1 100.0%	0 0.0%	4 66.7%	0 0.0%	2 33.3%	33 42.3%
Coordination with other professions	31 64.6%	15 45.5%	0 0.0%	0 0.0%	2 50.0%	7 100.0%	1 100.0%	0 0.0%	3 50.0%	0 0.0%	2 33.3%	46 59.0%

(7) Types of Disaster Nursing seen in different disaster cycles: Acute phase

Table 6-7 shows the education materials for Types of Disaster Nursing seen in different disaster cycles: Acute phase. In Japan the most utilized material was "basics and method in triage" with 45 schools (93.8%); followed by " Difference between disaster and emergency medicine" and " Emergency care and nursing during acute phase " both with 34 schools (70.8%); and the " Coordination with other professions " was 33 schools (68.8%). In Asia, the "basics and method in triage" was the most utilized with 21 schools (63.6%); followed by "Emergency care and nursing during acute phase " with 17 schools (51.5%).

Table 6-7 Education materials for Types of Disaster Nursing seen in different disaster cycles: Acute phase

	Japan N=48	Asia N=30	Cambodia	China	India	Indonesia	Rep. of Korea	Malaysia	Philippines	Taiwan	Thailand	Total N=78
Difference between disaster and emergency medicine	34 70.8%	16 48.5%	1 100.0%	1 100.0%	2 50.0%	5 71.4%	1 100.0%	0 0.0%	3 50.0%	1 100.0%	2 33.3%	50 64.1%
Medical needs and nursing needs	27 56.3%	16 48.5%	0 0.0%	0 0.0%	2 50.0%	6 85.7%	1 100.0%	0 0.0%	4 66.7%	0 0.0%	3 50.0%	43 55.1%
Structure of CSCA3T	29 60.4%	2 6.1%	0 0.0%	0 0.0%	1 25.0%	1 14.3%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	31 39.7%
Basics and method in triage	45 93.8%	21 63.6%	1 100.0%	1 100.0%	3 75.0%	6 85.7%	1 100.0%	1 33.3%	5 83.3%	0 0.0%	3 50.0%	66 84.6%
Initial response and the role of nursing in disaster-affected hospitals	28 58.3%	16 48.5%	0 0.0%	1 100.0%	2 50.0%	4 57.1%	1 100.0%	0 0.0%	5 83.3%	1 100.0%	2 33.3%	44 56.4%
Role of nursing in setting up and operating first-aid station	29 60.4%	14 42.4%	0 0.0%	1 100.0%	2 50.0%	4 57.1%	1 100.0%	0 0.0%	4 66.7%	1 100.0%	1 16.7%	43 55.1%
Role of nursing at Mobile clinic	19 39.6%	14 42.4%	0 0.0%	0 0.0%	2 50.0%	4 57.1%	0 0.0%	0 0.0%	5 83.3%	0 0.0%	3 50.0%	33 42.3%
Assessment of evacuation center	29 60.4%	12 36.4%	0 0.0%	0 0.0%	1 25.0%	6 85.7%	1 100.0%	0 0.0%	3 50.0%	0 0.0%	1 16.7%	41 52.6%
Coordination with Other professions	33 68.8%	14 42.4%	0 0.0%	0 0.0%	2 50.0%	6 85.7%	1 100.0%	0 0.0%	3 50.0%	0 0.0%	2 33.3%	47 60.3%
Emergency care and nursing during acute phase	34 70.8%	17 51.5%	0 0.0%	1 100.0%	2 50.0%	6 85.7%	1 100.0%	0 0.0%	4 66.7%	1 100.0%	2 33.3%	51 65.4%

(8) Disaster nursing seen in disaster cycle: medium- and long-term phase

Table 6-8 shows the education materials for disaster nursing seen in disaster cycle: medium- and long-term phase. In Japan, the most utilized material was " Daily Support for victims " with 33 schools (68.8%); followed by 24 schools (50.0%) with " Support for community reconstruction and coordination with other professions ". In Asia, the " Support for community reconstruction and coordination with other professions " was the most utilized with 11 schools (33.3%), followed by "Definition of reconstruction" with 10 schools (30.3%).

Table 6-8 Education materials for disaster nursing seen in disaster cycle: medium- and long-term phase

	Japan N=48	Asia N=30	Cambodia	China	India	Indonesia	Rep. of Korea	Malaysia	Philippines	Taiwan	Thailand	Total N=78
Definition of reconstruction	18 37.5%	10 30.3%	0 0.0%	0 0.0%	2 50.0%	5 71.4%	1 100.0%	0 0.0%	1 16.7%	0 0.0%	1 16.7%	28 35.9%
Daily Support for victims	33 68.8%	9 27.3%	0 0.0%	0 0.0%	2 50.0%	4 57.1%	1 100.0%	0 0.0%	2 33.3%	0 0.0%	0 0.0%	42 53.8%
Support for community reconstruction and coordination with other professions	24 50.0%	11 33.3%	0 0.0%	0 0.0%	2 50.0%	5 71.4%	1 100.0%	0 0.0%	1 16.7%	0 0.0%	2 33.3%	35 44.9%

C. Human resources to teach disaster nursing

1. The number of teachers

Figure 2 shows the number of teachers teaching disaster nursing: 21 schools (43.7%) in Japan only had one person, and in Asia as a whole this too was the highest number, with 19 schools (33.3%). A faculty of nine maximum was involved in Japan, and in Asia teachers had up to 18 people involved (India). The average in Japan was 2.38 ± 2.07 , in Asia the average was 3.79 ± 4.74 .

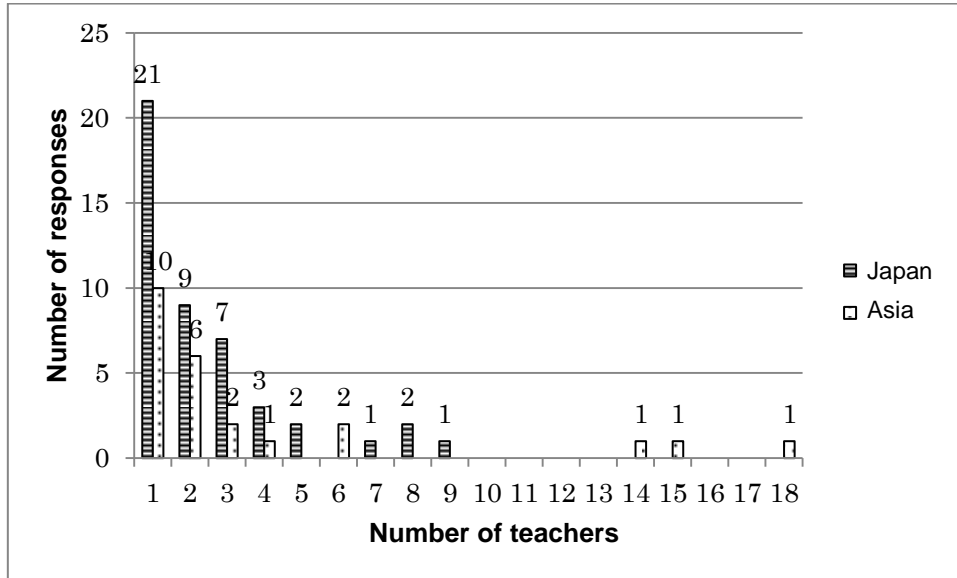


Figure 2 Number of teachers teaching disaster nursing

2. Attributes of the person responsible for teaching disaster nursing education

(1) Gender

Table 7 shows the gender responsible for teaching disaster nursing education (hereinafter, the person responsible). For gender of the person responsible, women were more common: in Japan 41 schools reported that they were women (85.4%) and 3 schools stating they were men (6.3%); in Asia it was 17 women (56.7%), and 8 males (26.7%).

Table 7 Gender responsible for teaching disaster nursing education

	Japan	Asia	Cambodia	China	India	Indonesia	Rep. of Korea	Malaysia	Philippines	Taiwan	Thailand	Total
Male	3 6.3%	8 26.7%	1 100.0%	0 0.0%	0 0.0%	3 42.9%	0 0.0%	0 0.0%	2 33.3%	0 0.0%	1 16.6%	12 15.4%
Female	41 85.4%	17 56.7%	0 0.0%	1 100.0%	2 50.0%	2 28.6%	1 100.0%	3 100.0%	2 33.3%	1 100.0%	5 83.3%	58 74.4%
No response	4 8.3%	5 16.7%	0 0.0%	0 0.0%	2 50.0%	2 28.6%	0 0.0%	0 0.0%	2 33.3%	0 0.0%	0 0.0%	9 11.5%
Total	48 100.0%	30 100.0%	1 100.0%	1 100.0%	4 100.0%	7 100.0%	1 100.0%	3 100.0%	6 100.0%	1 100.0%	6 100.0%	78 100.0%

(2) Age

Figure 3-1, Figure 3-2 shows the age of the person responsible. In Japan, most were 50-54 years old in 14 schools (29.1%), and 45 years old or above in 38 schools (79.2%). On the other hand, in Asia most schools had 35-39 year-old in 10 schools (33.3%), and 45 years old or above in 5 schools (16.7%) Looking at the age ratio, Japan's age of persons in charge were clearly higher than the distribution of those in Asia.



Figure 3-1 Age of the person responsible

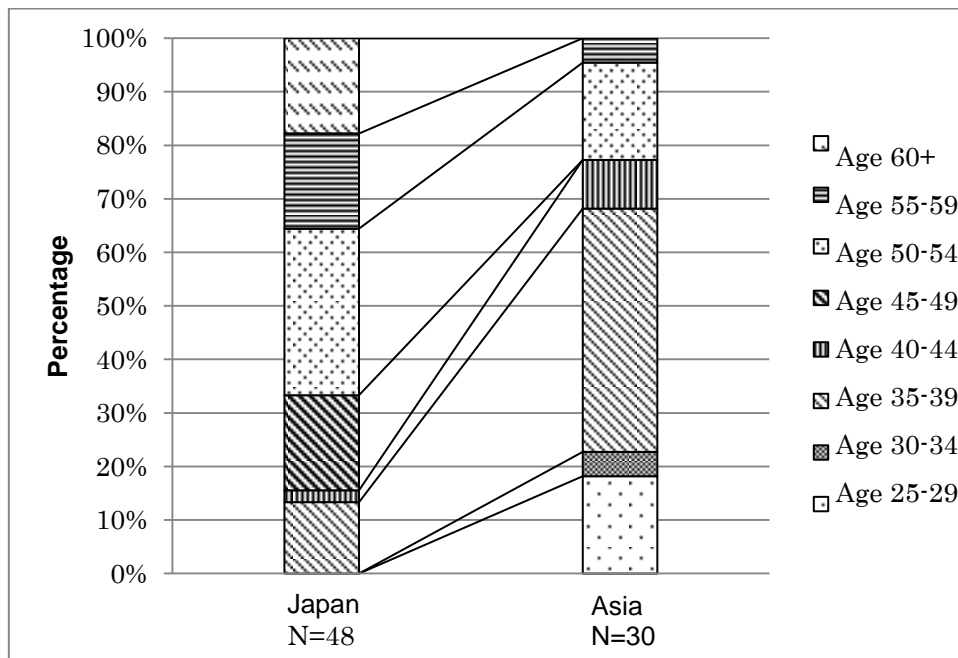


Figure 3-2 Age ratio of the person responsible (excluding "No response")

(3) Years of experience

Figure 4-1, Figure 4-2 shows the years of experience of the person responsible. In terms of years of experience, in Japan, ‘less than 10 years more than five years’; ‘more than 10 years less than 20 years’; ‘more than 20 years’, each were 10 schools (20.8%), however in Asia ‘more than 10 years less than 20 years’ had the highest number of 8 schools (26.7%).

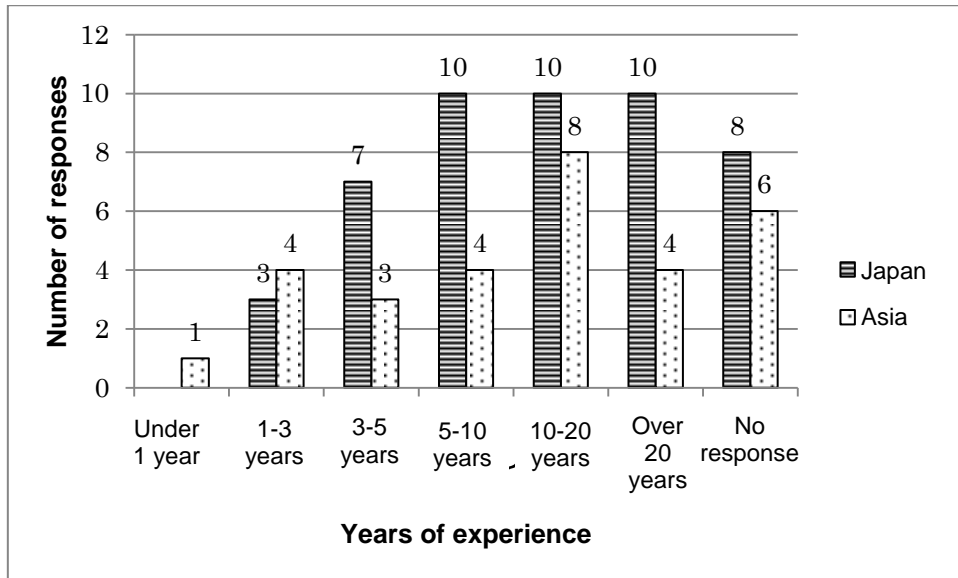


Figure 4-1 Years of experience of the person responsible

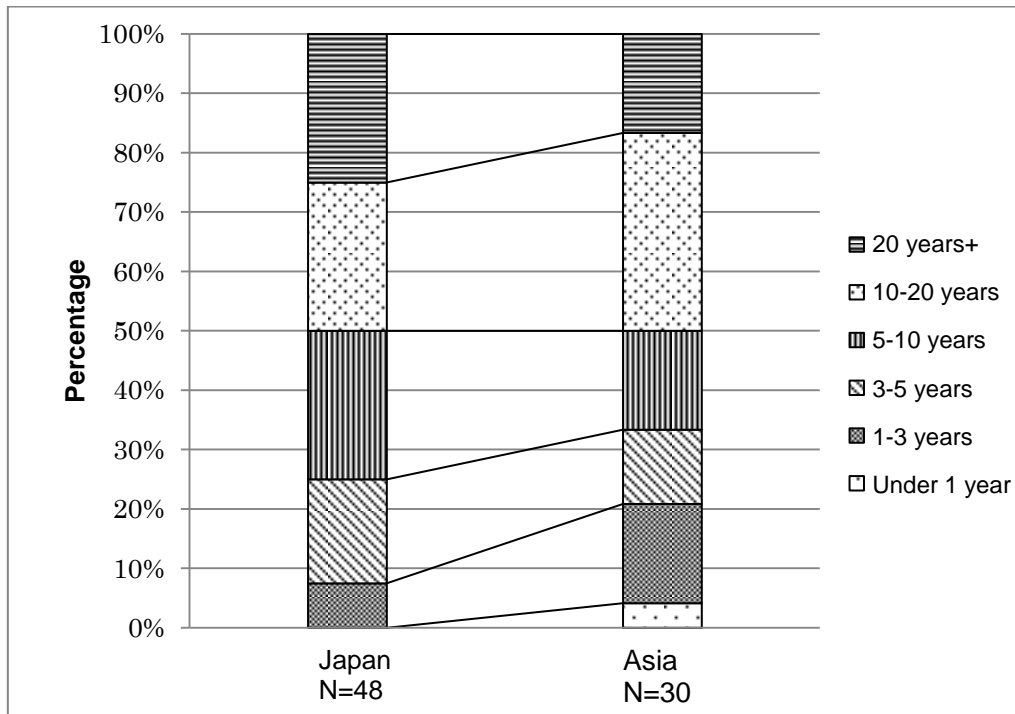


Figure 4-2 Years of experience ratio of the person responsible (excluding “No response”)

(4) Engaged years of disaster nursing education

Figure 5-1, Figure 5-2 shows the number of years engaged in disaster nursing education of the person responsible. The amount of engagement in both Japan and Asia ‘had more than three years less than 5 years’ was highest with 12 schools (Japan: 25.0%, Asia: 40%). Japan had a greater percentage of teachers engaged in disaster studies for an extensive number of years.

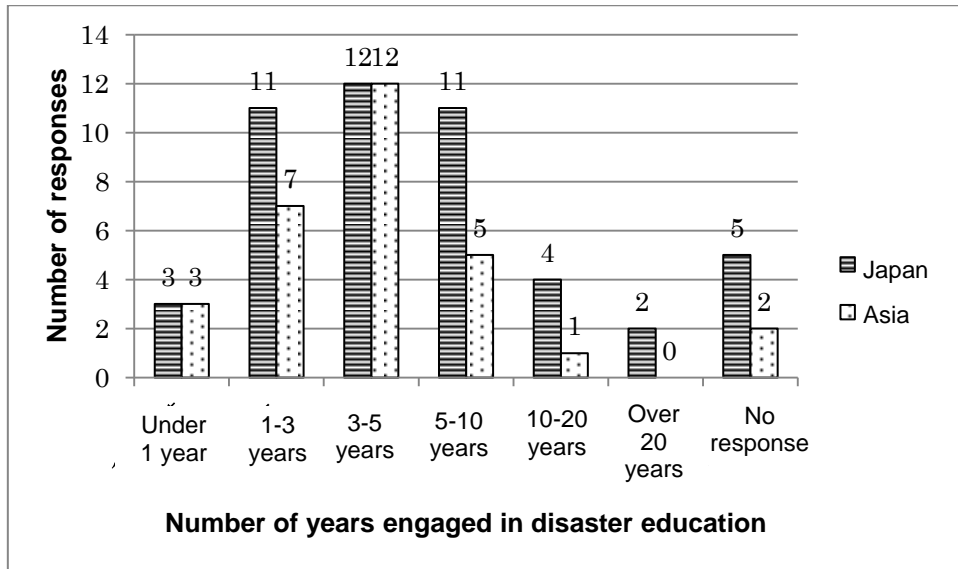


Figure 5-1 Number of years engaged in disaster education of the person responsible

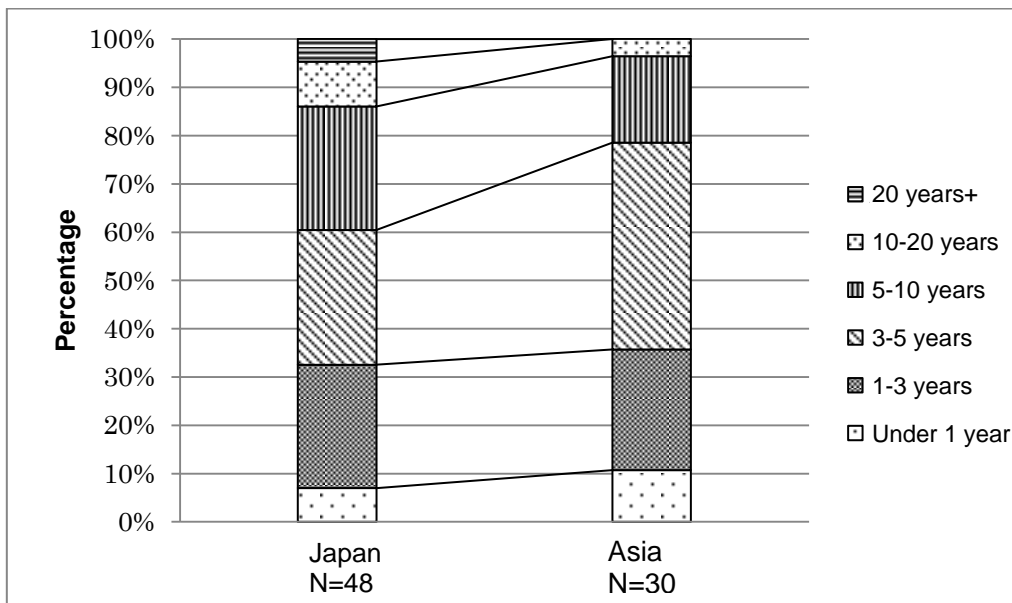


Figure 5-2 Number of years engaged in disaster education ratio of the person responsible (excluding “No response”)

3. Professional background of the person responsible

(1) Main areas of expertise

Table 8, Figure 6 shows main areas of expertise of the person responsible. In Japan, ‘disaster nursing’ had the highest number with 22 schools (45.8%), followed by ‘community health nursing’ at 15 schools (31.3%), and ‘critical care’ at 12 schools (25.0%). In Asia, ‘disaster nursing education’ and ‘nursing’ had the highest number at 13 schools (43.3%), followed by ‘critical care’ at 9 schools (30.0%).

Table 8 Main areas of expertise of the person responsible

	Japan N=48		Asia N=30	
Disaster nursing	22	45.8%	13	43.3%
Nursing ethics	1	2.1%	1	3.3%
Nursing information	1	2.1%	3	10.0%
Infection control nursing	3	6.3%	4	13.3%
Nursing theory	0	0.0%	5	16.7%
History of nursing	0	0.0%	1	3.3%
Nursing skills / arts	5	10.4%	6	20.0%
Pediatric nursing	1	2.1%	4	13.3%
Maternal nursing	3	6.3%	2	6.7%
Gerontological Nursing	3	6.3%	3	10.0%
Perinatal nursing	4	8.3%	2	6.7%
Critical care nursing	12	25.0%	9	30.0%
Chronic nursing	6	12.5%	2	6.7%
Cancer nursing	3	6.3%	2	6.7%
Rehabilitation nursing	3	6.3%	2	6.7%
Community health nursing	15	31.3%	7	23.3%
Home care nursing	7	14.6%	2	6.7%
Psychiatric nursing	1	2.1%	0	0.0%
International nursing	5	10.4%	1	3.3%
Nursing administration	11	22.9%	6	20.0%
Nursing education	2	4.2%	13	43.3%
Others	6	12.5%	4	13.3%

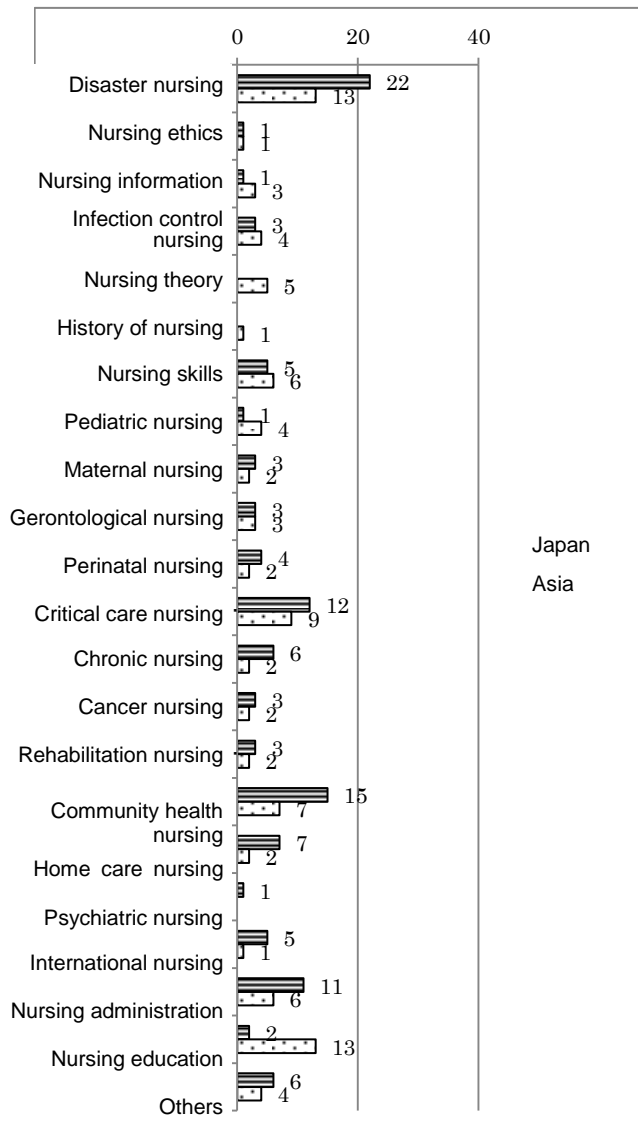


Figure 6 Main areas of expertise of the person responsible

(2) Job title

Figure 7-1 and Figure 7-2 shows the job titles of persons responsible. In Japan, ‘professor’ had the highest number with 17 schools (35.4%), followed by ‘associate professor’ at 15 schools (31.3%), and ‘lecturer’ at 12 schools (25.0%). In Asia, ‘lecturer’ had the highest number in 19 schools (63.3%), ‘professor’ at 4 schools (13.3%), ‘research associate’ at 4 schools (13.3%), and ‘associate professor’ at 2 schools (6.7%).

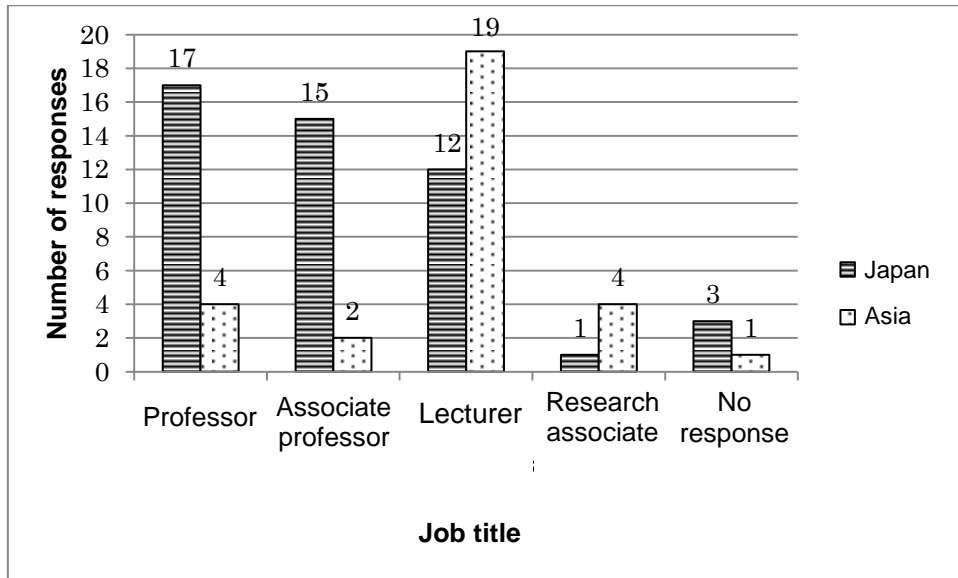


Figure 7-1 Job titles of persons responsible

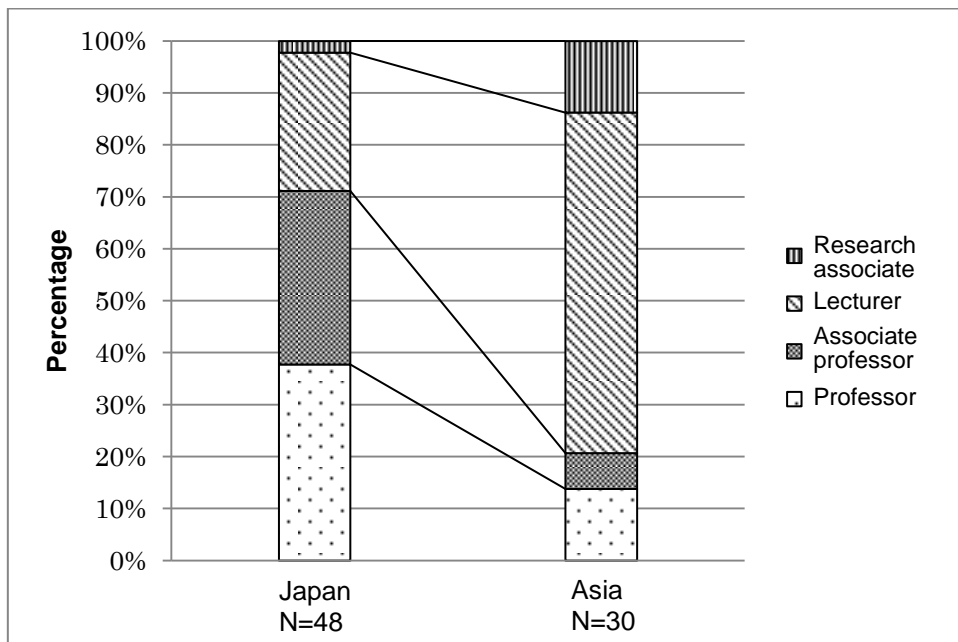


Figure 7-2 Job title ratio of persons responsible (excluding “No response”)

(3) Degree achieved

Figure 8-1 and Figure 8-2 shows the degrees that the person responsible has achieved. In Japan ‘Master’s Degree’ had the highest number at 29 schools (60.4%), followed by ‘Ph.D.’ at 16 schools (33.3%). In Asia, a ‘Masters’ also had the highest number at 21 schools (70.0%), followed by ‘Ph.D.’ in 7 schools (23.3%).

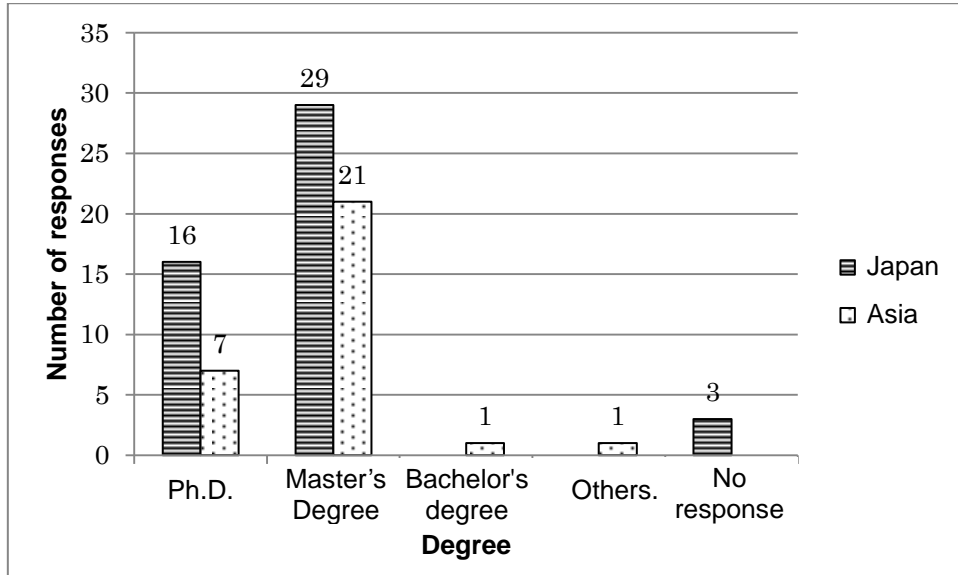


Figure 8-1 Degrees that the person responsible has achieved

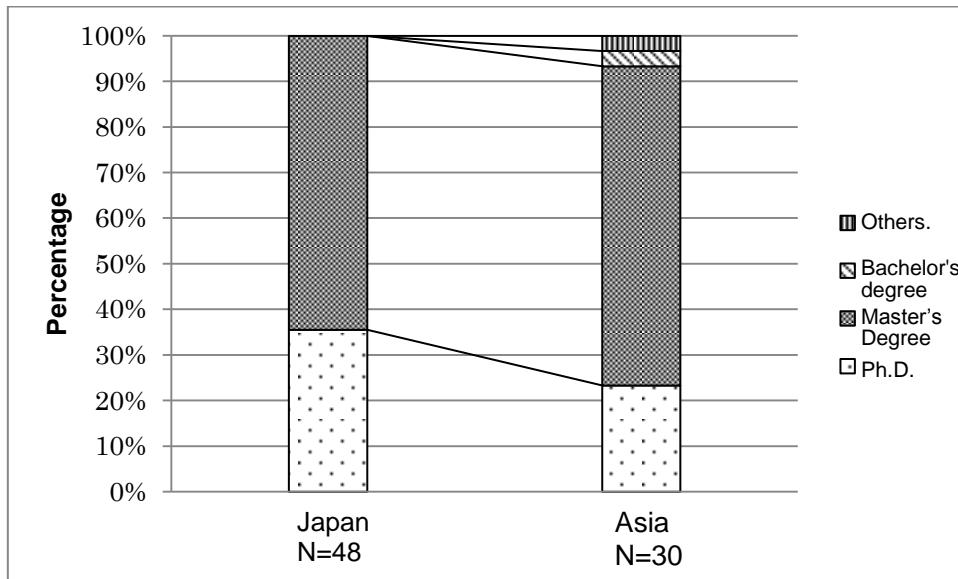


Figure 8-2 Ratio of degrees that the person responsible has achieved (excluding “No response”)

(4) Certification achieved

Table 9, Figure 9 show the certification that is acquired by the person responsible. Those who answered that they have a ‘nursing license’ were 90% or more in both Japan and Asia. The next highest in Japan was with 21 schools (43.8%) who responded that there is a ‘public health nurse’ qualified, whereas, in Asia 9 schools (30.0%) replied that they have a qualified ‘midwife.’

Table 9 Certification that is acquired by the person responsible

	Japan N=48		Asia N=30	
Nurse	44	91.7%	27	90.0%
Midwife	6	12.5%	9	30.0%
Public health nurse	21	43.8%	6	20.0%
Other	8	16.7%	7	23.3%

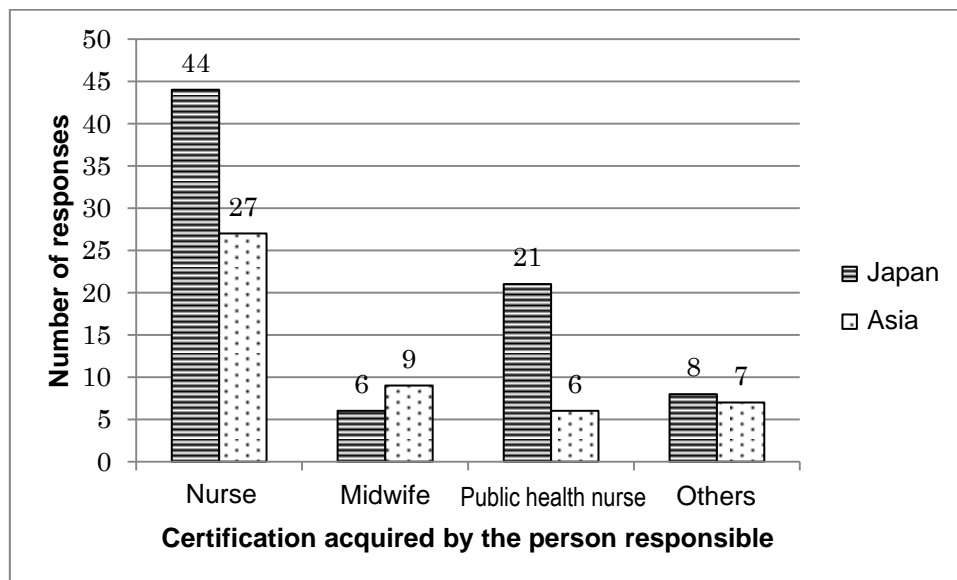


Figure 9 Certification that is acquired by the person responsible

4. Presence or absence of experience in disaster, and disaster relief experience of the person responsible

(1) Presence or absence of disaster experience of the person responsible

Figure 10 shows the presence or absence of disaster experience of the person responsible. For disaster experience: in Japan, 18 schools (37.5%) responded that they ‘do have experience,’ in Asia, 18 schools (60.0%), report that the people responsible in Asia, in general, had more disaster experience. On the other hand, for those who said they ‘do not have any experience,’ in Japan, it was 25 schools (52.1%), and in Asia, there were 11 schools (36.7%).

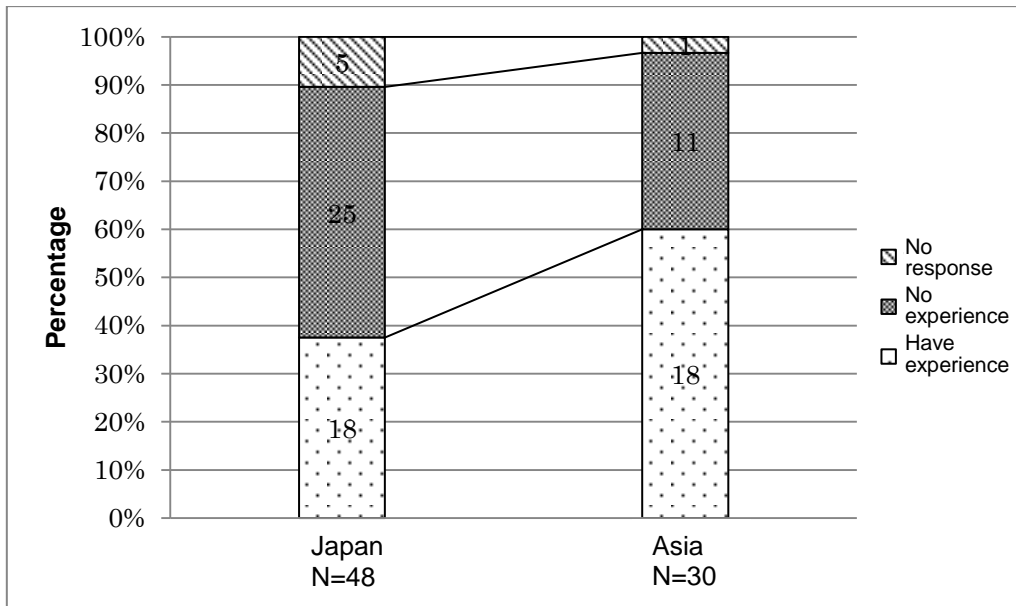


Figure 10 Presence or absence of disaster experience of the person responsible

(2) Presence or absence of relief experience of the person responsible

Figure 11 shows the presence or absence of relief experience. In regard to relief experience, those who answered that they ‘did have experience,’ in Japan it was 28 schools (58.3%), and in Asia it was 16 schools (53.3%), about the same ratio. Those who answered that they ‘did not have any experience,’ in Japan it was 16 schools (33.3%), and in Asia it was 14 schools (46.7%).

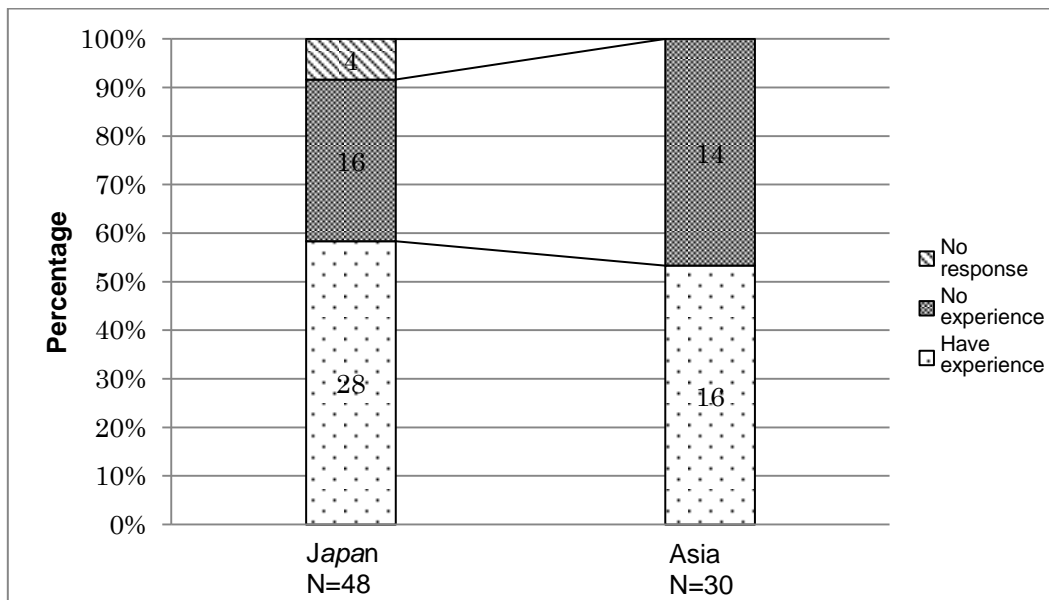


Figure 11 Presence or absence of relief experience of the person responsible

D. Challenges in performing disaster nursing education

Table 10 shows challenges in performing disaster nursing education. In Japan, “Luck of qualified instructors,” was 20 schools (35.7%), followed by “Have no experience in disaster relief” with 15 schools (26.8%). In Asia, those who said “No equipment to simulate disaster” had 22 schools (66.7%), followed by “Lack of domestic and/or international network” with 19 schools (57.6%), then those who said “No textbooks available” was reported by 17 schools (51.5%). Other opinions include: in Japan, 5 cases of “Curriculum, time to teach is insufficient”; 4 cases of “Teaching realistically difficult for students”; 4 cases of “Too many students and not enough teachers”; 2 cases of “Not much opportunity to have a discussion on-campus”; 2 cases of “It is difficult to reconstruct disaster nursing”; 1 case of “Content is shallow because I am in charge of everything”; and 1 case of “It is hard to evaluate our ‘reaching’ status in students because it is a 4th grade subject.”

Table 10 Challenges in performing disaster nursing education

	Japan N=56	Asia N=33	Cambodia	China	India	Indonesia	Rep. of Korea	Malaysia	Philippines	Taiwan	Thailand	Total N=89
No textbooks available	2 3.6%	17 51.5%	1 100.0%	0 0.0%	1 25.0%	7 87.5%	0 0.0%	1 33.3%	4 57.1%	0 0.0%	3 42.9%	19 21.3%
No equipment to simulate disaster	14 25.0%	22 66.7%	1 100.0%	1 100.0%	4 100.0%	6 75.0%	0 0.0%	2 66.7%	3 42.9%	0 0.0%	5 71.4%	36 40.4%
No syllabus available	0 0.0%	8 24.2%	1 100.0%	0 0.0%	1 25.0%	3 37.5%	0 0.0%	1 33.3%	1 14.3%	0 0.0%	1 14.3%	8 9.0%
Luck of funding for teaching	11 19.6%	8 24.2%	1 100.0%	1 100.0%	1 25.0%	3 37.5%	0 0.0%	0 0.0%	1 14.3%	0 0.0%	1 14.3%	19 21.3%
No appropriate teaching materials available	4 7.1%	15 45.5%	1 100.0%	1 100.0%	2 50.0%	4 50.0%	0 0.0%	2 66.7%	2 28.6%	1 100.0%	2 28.6%	19 21.3%
Luck of qualified instructors	20 35.7%	15 45.5%	0 0.0%	0 0.0%	3 75.0%	4 50.0%	0 0.0%	2 66.7%	3 42.9%	0 0.0%	3 42.9%	35 39.3%
Have no experience in disaster relief	15 26.8%	15 45.5%	0 0.0%	0 0.0%	3 75.0%	3 37.5%	0 0.0%	2 66.7%	1 14.3%	0 0.0%	6 85.7%	30 33.7%
Instructor do not have time to go to study seminars	7 12.5%	4 12.1%	0 0.0%	1 100.0%	0 0.0%	1 12.5%	0 0.0%	1 33.3%	0 0.0%	1 100.0%	0 0.0%	11 12.4%
Lack of domestic and/or international network	4 7.1%	19 57.6%	1 100.0%	0 0.0%	2 50.0%	6 75.0%	0 0.0%	1 33.3%	5 71.4%	1 100.0%	3 42.9%	23 25.8%
Lack of the public’s familiarity with disaster nursing	12 21.4%	8 24.2%	1 100.0%	0 0.0%	2 50.0%	2 25.0%	0 0.0%	0 0.0%	2 28.6%	1 100.0%	0 0.0%	20 22.5%
No support from other divisions	11 19.6%	8 24.2%	1 100.0%	1 100.0%	0 0.0%	3 37.5%	0 0.0%	0 0.0%	2 28.6%	0 0.0%	1 14.3%	19 21.3%
Institutions do not make commitments	8 14.3%	4 12.1%	0 0.0%	0 0.0%	0 0.0%	2 25.0%	0 0.0%	0 0.0%	1 14.3%	0 0.0%	1 14.3%	12 13.5%
The course does not cover whole disaster cycle	4 7.1%	16 48.5%	0 0.0%	0 0.0%	2 50.0%	3 37.5%	0 0.0%	3 100.0%	3 42.9%	1 100.0%	4 57.1%	20 22.5%
Others	21 37.5%	5 15.2%	0 0.0%	1 100.0%	2 50.0%	0 0.0%	1 100.0%	0 0.0%	0 0.0%	1 100.0%	0 0.0%	26 29.2%

E. The recognition and outlook for disaster nursing education

1. The need for disaster nursing education

Figure 12 shows the answer to whether disaster nursing education is essential. In Japan, those who answered "yes (it is required)" were from 45 schools (80.4%), and in Asia it was 28 schools (84.4%). In Japan, those who answered "no (it is not required)," came from 2 schools (3.6%), and in Asia it was 4 schools (12.1%). In Japan, those who answered, "don't know" was reported by 6 schools (10.7%), and in Asia, it was 1 school (3.0%).

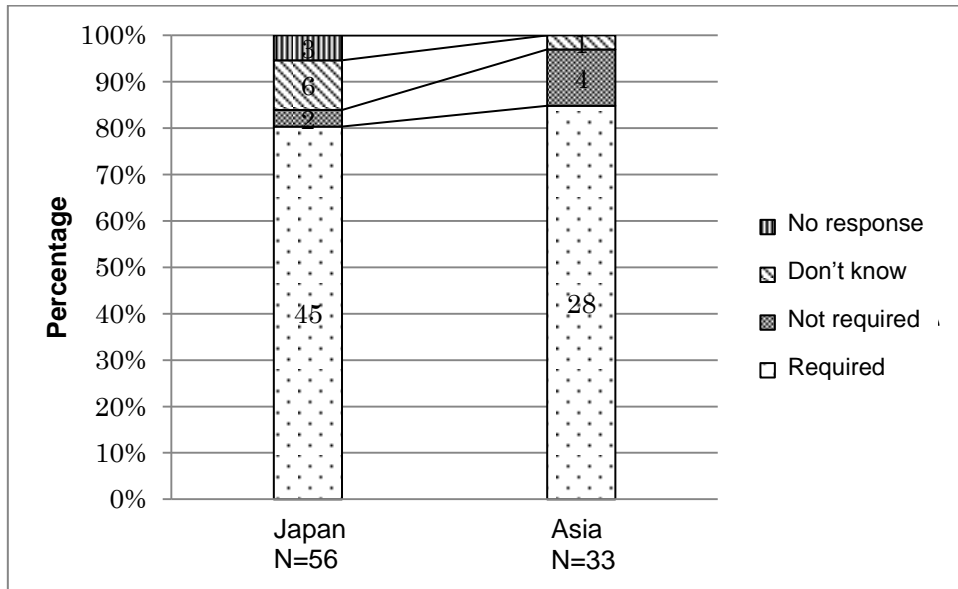


Figure 12 Need for disaster nursing education

2. Recognition of ICN disaster nursing competencies

Figure 13 shows those who answered that they know of ICN Disaster Nursing Competencies. Those who answered that "Yes (they know of it)" in Japan were 30 schools (53.6%), in Asia it was 22 schools (66.7%). Those who answered that, "No (they do not know of it)" in Japan, 24 schools (42.9%), with 10 schools (30.3%) in Asia answering in the negative.

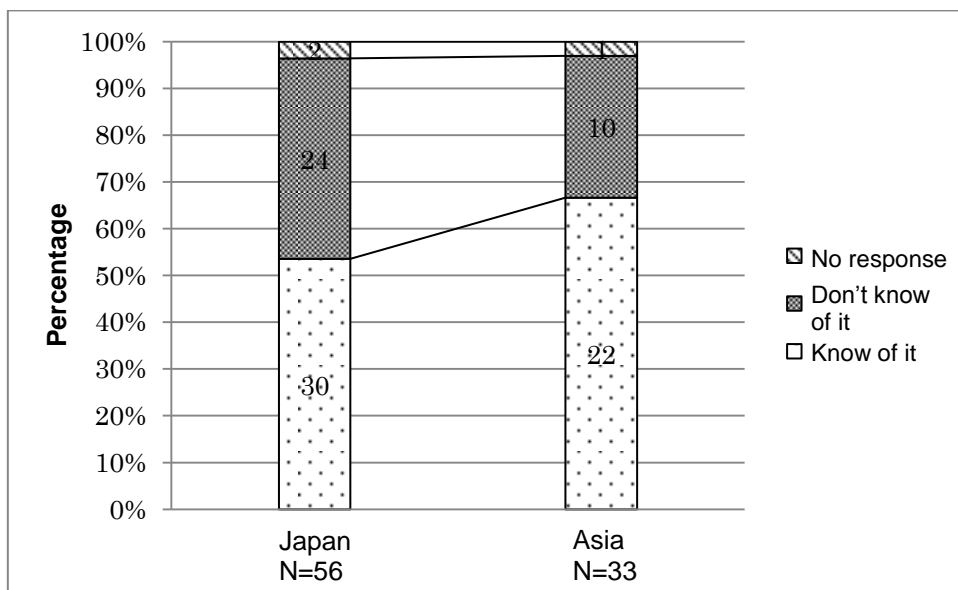


Figure 13 Recognition of ICN disaster nursing competencies

3. Opportunity of disaster nursing education outside of class

Figure 14 shows the opportunity for disaster nursing education outside of class. In Japan those who said “none” were the largest number with 22 schools (39.3%), followed by “Lectures by outside speakers” with 12 schools (21.4%), “Special Lecture” with 6 schools (10.7%), and “seminar” with 5 schools (8.9%). In Asia, “Special Lecture” with the largest number at 14 schools (42.4%), followed by “seminar,” and “none” both being 5 schools (15.2%). “Lectures by outside speakers” were 2 schools (6.1%).

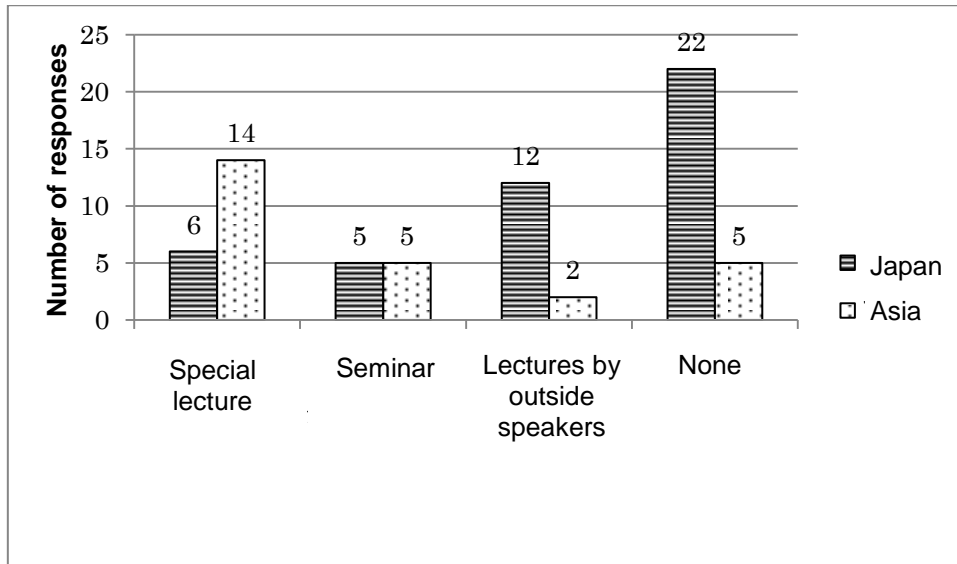


Figure 14 Opportunity of disaster nursing education outside of class

4. Planning for lessons on disaster nursing

Figure 15 shows the presence or absence of the introduction of the lesson plan on disaster nursing. In Japan, those who answered, “There is a plan” were 30 schools (53.6%), those who answered, “there is no plan” were 14 schools (25.0%), and unanswered were 12 schools (21.4%). In Asia, those who answered, “there is a plan” were 30 schools (90.9%), those who answered, “there is no plan” were 2 schools (6.1%), and unanswered was 1 school (3.0%).

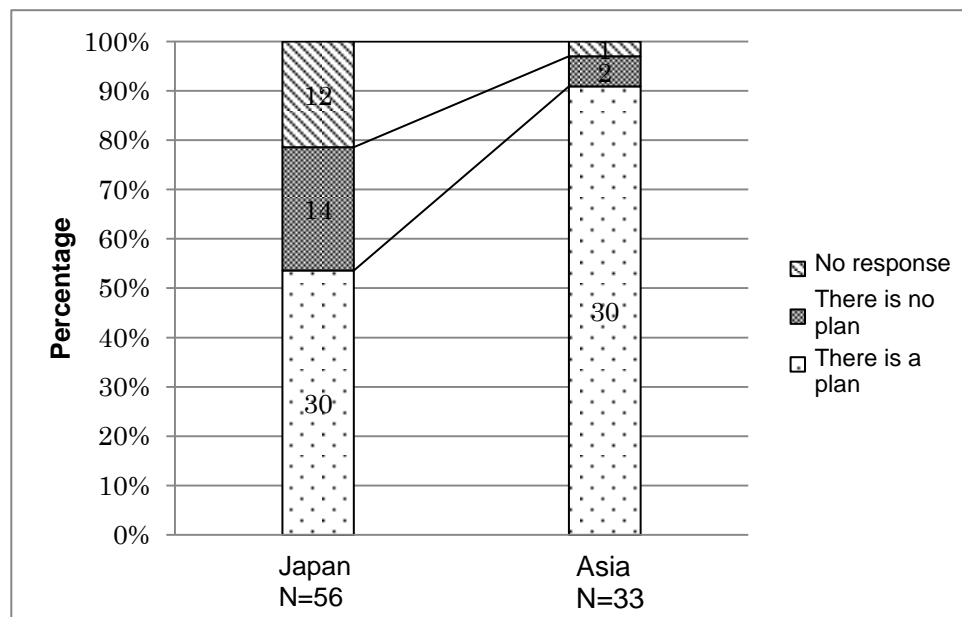


Figure 15 Planning for lessons on disaster nursing

5. The exchange opportunity on disaster nursing

(1) Presence or absence of exchange programs on disaster nursing

Figure 16 shows the presence or absence of exchange programs in disaster nursing. Those who answered they 'do have a program' in Japan were 5 schools (8.9%) and in Asia it was 10 schools (30.3%). Those who answered they 'do not have a program' in Japan were 48 schools (85.7%) and in Asia it was 22 schools (66.7%).

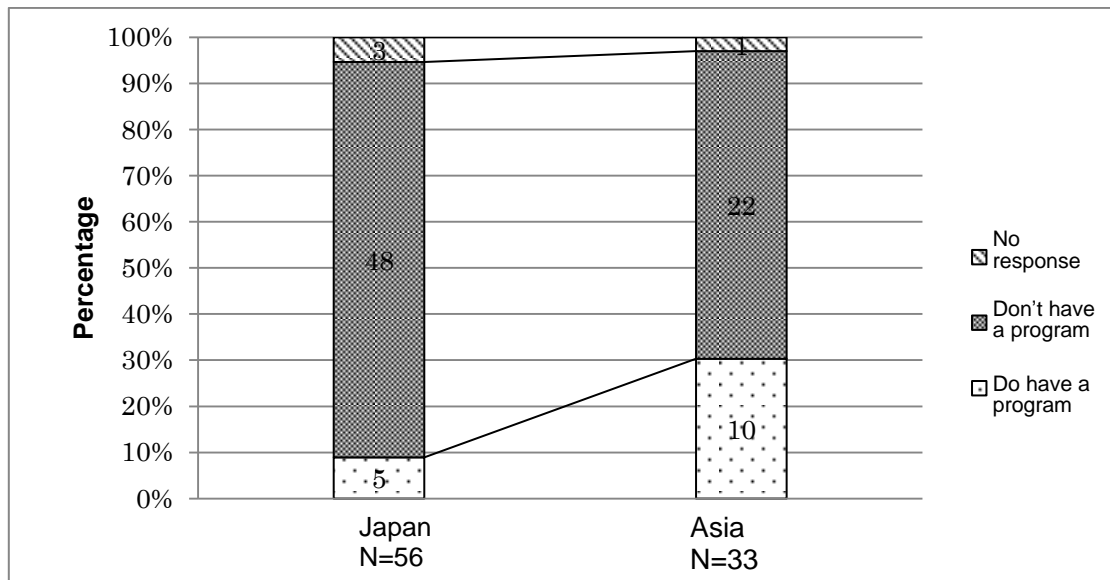


Figure 16 Presence or absence of exchange programs on disaster nursing

(2) Hope of exchange opportunities in disaster nursing

Figure 17 shows the hope of exchange opportunities in disaster nursing. In Japan, 31 schools (55.4%) answered with their 'desire to do so,' whereas Asia with 29 schools (87.9%) shows Asia had a higher percentage. In Japan 15 schools claimed that they 'do not want to,' whereas in Asia there were only 2 schools (6.1%).

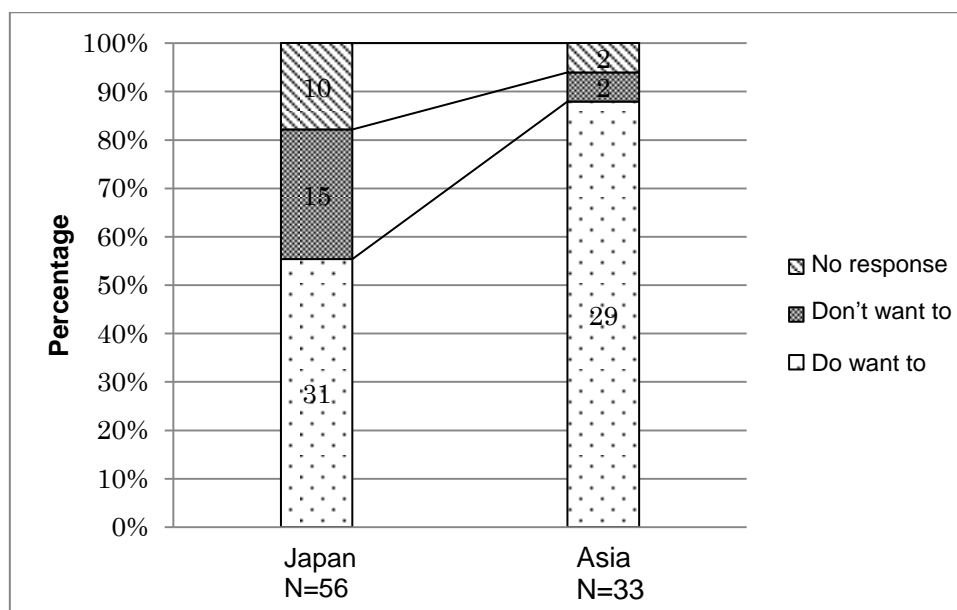


Figure 17 Hope of exchange opportunities in disaster nursing

IV. Consideration

A. Implementation status of disaster nursing education

1. Introduction of disaster nursing education

With the questionnaire response rate being so very low, generalization is difficult, but the percentage of disaster nursing classes that are incorporated in universities both in Japan and Asia was nearly 90%. Considering that in the survey of 2004 in Japan, courses implementing "Disaster Nursing" as an established subject was only 5%, and being implemented as part of other subjects also was still only a little over 20% (Hyogo Prefectural University 21st Century COE Program, 2005, p.481), this study has shown that disaster nursing is more widely introduced and becoming popular. For the years of the start of disaster nursing education, 2000 or later were the highest in both Japan and Asia; particularly in Japan, the universities that began offering this education between 2005 and 2009 accounted for 40%, which indicates that the amendment of specified rules had a high impact on the establishment of disaster nursing in general. In addition, it is believed that in Japan, more than half answered that they had established the course as an independent subject, which indicates disaster nursing has penetrated as a specialized area. In a 2007 survey of nursing universities in Asia, the percentage of those conducting classes in disaster nursing was 86.3% (Miura, Ohara, Ito, et al, 2009), which was nearly the same results as this study.

For subjects in disaster nursing, the proportion of them being 'required courses' is about 70%, offered as an 'elective' was also observed in a Japanese university. In addition, there is a tendency for the training to be offered in upper grades, with about 60% offered in a lecture format, about 30% in an exercise format, and a very small number of universities implementing practical training. According to the survey of teachers by Matsunaga (2010), 85% of the respondents answered that disaster technology exercise is needed; previous studies indicated that development of exercises such as simulation or studies of practice reporting has increased in the last few years. (Boda, Yokouchi, Okada, et al., 2007; Hata, 2008; Nakanobu, Ueda, 2008; Ozaki, 2010; Hyakuta, Nakanobu, 2011; Nakamura, Ibe, Kuraoka, et al, 2011) Most classes are positioned as a compulsory subject at the universities of Asia, tending to be offered at about the same rate in any year, about 60% in lectures, while practical training was at about 40%. It is thought that they do not teach it in an exercise format since the universities in other countries do not have exercise room in their facility, and the classes often take place in a practical training facility.

As an opportunity for disaster nursing education outside of class, it is considered that the percentage of those answering "no" is high in Japanese universities because it is positioned as an independent subject. The ratio of respondents that provided the opportunity for "Special Lecture" is high in Asian universities, probably because learning opportunities are provided widely since it is not installed as an independent subject matter.

2. The contents of disaster nursing education

As for the contents of disaster nursing education, it was discovered that the actual educational content about the basic knowledge related to disaster nursing is being implemented in many universities. Universities that contains "ethics and disaster", "cross-cultural assessment and disaster", and "gender and disaster" is small in both Japan and Asia, which indicates the necessity to consider how we can incorporate this important content in disaster nursing education.

As for nursing by function, the universities that are incorporating "terrorism" preparations are few both in Japan and Asia. Also shown is that there is a decrease in the numbers and amount of universities incorporating theory and research of disaster nursing content in their educational programs. This point should also be considered with the background that the textbooks themselves in Japan do not include such content while most textbooks in the West discuss these issues at length. Also, continuing education for biohazards and bioterrorism is not sufficient for nurses, and the necessity to increase readiness has been discussed (Mori, 2009), we need to consider the extent to how much to implement those in basic nursing

education. For psychological and mental care during a disaster, while it has been introduced at universities in Japan, the ratio is low for universities in Asia. It is believed that is due to a background that attention to psychological and mental care is high in Japanese universities in recent years, and it has also been incorporated into the textbooks.

For the nursing of people who are needing assistance during a disaster, very few universities have incorporated this topic compared to other items, and about half of it was "chronic disease" and "the elderly" in Japan; in Asia, "child" and "elderly" was the highest and marked about 30%. Answers for "ethnic minorities" were even lower, but its need should be further addressed in educational content as in the current era where the number of people with diverse cultural backgrounds is increasing.

In disaster nursing by disaster cycle, for all cycles including prevention/preparation, acute phase, and medium-and long-term, more Japanese universities adopted this topic than universities in Asia. Situations where the concept of the disaster nursing cycle of disasters shows that there has been penetration in Japan. In Japan, the idea of disaster cycle is handled in most textbooks (International Nursing Association Disaster Nursing Training Steering Committee, 1999; Yuko Minami, Aiko Yamamoto, 2007; Ohara Mariko supervision, 2008; Hiroshi Nonaka, 2008; Akiko Sakai, Shizuko Kikuchi, 2008; The Japanese Red Cross Society Department of Nursing, 2012; Mariko Ohara, Akiko Sakai supervision, 2012), and the content of education is examined as a matrix of disaster cycles and the persons needing assistance by a study by Oyama, Tanigishi, Yamamoto, et al (2010).

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On the other hand, in universities in Asia, "disaster prevention manual", "Configuring CSCA3T" or "assistance which put a perspective on the life of the victim" were barely included or limited only to specific universities, and this was indicated as a problem. Miura, Ohara, Ito, et al. (2009) pointed out that in nursing in accordance with the disaster cycle, rescue operations is the most important issue immediately after the disaster, and focusing on training of critical care nursing makes sense, however, the support for the life of the people forced to live in shelters also becomes important, and it is necessary to raise awareness of disaster nursing education, including during the medium-to long-term and prevention/preparation.

B. Human resources to teach disaster nursing

For the person responsible for teaching disaster nursing, there was a trend for having many women in both Japanese and Asian universities. For universities in Japan, those 45 years of age or older are often responsible, tending to be higher in Japan than in Asia, engaging in both years of disaster education and years of experience. In Asian universities, the person responsible tended to be much younger with fewer years of disaster education and years of experience. In a 2007 survey conducted in nursing colleges in Asia (Miura, Ohara, Ito, et al, 2009), though it was not in the exact same condition as this study because it was surveyed as an attribute of the respondents, it was shown that those aged 40 or over accounted for more than 80% of respondents, and about 65% of respondents had years of experience of more than 10 years; so the result of this study showed a different result.

For the main areas of expertise of the person responsible, the highest ratio of respondents answering was "Disaster Nursing" for both Japanese universities and universities in Asia. In the survey of 2007 (Miura, Ohara, Ito, et al, 2009), about half of those who answered this questions were in "Nursing Education" and

only one answered as expert in "Disaster Nursing", which in comparison shows that the disaster nursing has been established as a specialized area.

As for job title of the responsible person, nearly 70% were either Associate Professor or Professor at Japanese universities, but lecturer made up 60 percent at the universities in Asia, where the difference in job title was observed. For acquired degree, the ratio of Japanese people with a PhD was about 10% higher, but the trend was similar.

For disaster experience of the person responsible, 50% of persons responsible in Japan answered no, while in universities in Asia, 60% had disaster experience, and the difference was observed. As for relief experience of the person responsible, it was almost the same at about 50% in both universities in Japan and in Asia. This result shows that the number of people with relief experience and disaster experience has increased since the 2007 study as the result for the people with disaster experience or relief experience was only about 30%. (Miura, Ohara, Ito, et al, 2009)

C. Challenges in developing disaster nursing education

As an exercise in developing a disaster nursing educational program, "there are no human resources to teach the material", "I have no experience in disaster relief," and, 'the lack of appropriate teachers to teach disaster nursing' were raised.

On the other hand, for universities in Asia, more issues with materials, such as "there is no simulation equipment", "there is no textbook" and issues in the learning environment, such as "no national or international networks" were mentioned. For Japan, the physical environment, such as simulation equipment and textbooks are becoming sufficient, but it is believed that issues of human resource development are large. For universities in Asia, issues of human resource development have also been left behind, but it is more necessary to complete the development of the physical environment.

D. The recognition and outlook for disaster nursing education

The implementation of disaster nursing education is essential, and to the majority of those at the universities of Asia and of Japan, the understanding of the deployment of basic disaster nursing education is becoming much more common. On the other hand, only about 60 to 70% knew about the ICN Disaster Nursing Competencies, and for nursing training from a global perspective, the challenge is remains.

For the implementation plans for training in disaster nursing, we believe that the ratio of no answer was high because the introduction is already underway in Japan.

There were not many universities that have exchange programs in disaster nursing either in Japan or Asia, and many universities expressed their wish to have them in the future. For universities in Asia, a higher number already has an exchange program, and the percentage of those who wish for one was also high, thus we conclude that they focus on opportunities for interaction in disaster nursing education.

E. Summary

Both universities in Japan and Asia, the situation that a disaster nursing education has been widely spread is revealed, but few universities have introduced the content such as consideration for cross-culture and gender, disaster and ethics, nursing in terrorism, nursing by assistance needed, and theory or research in disaster nursing, thus a need to examine the teaching content for an academic degree has been demonstrated. For universities in Asia, it is necessary to expand disaster nursing education that includes disaster nursing for the medium- to long-term and prevention/preparation as well as psychological and mental care.

The challenge of educational, training of human resources to teach disaster nursing education is an urgent issue, and in Japan, it is necessary to provide training opportunities to those who are already teachers. Considering that many have no relief experience, a program to create a network of teachers, and create the opportunity to enter the field with other teachers and nurses with rich relief experience is required. Development of teaching materials and

educational environment is needed in Asia, however, it is also important to provide not only the facility and equipment, but the methods to fully utilize those at the same time. In the future, our university would like to provide the opportunity to expand national and international network for disaster nursing education, and to share further information by becoming a base for international disaster nursing research and education.

Acknowledgment

I would like to thank sincerely to everyone who answered the survey and those who provided information in their busy schedule understanding the spirit of the present study. Thank you very much. In addition, I would like to thank Associate Professor Shuichi Kawasaki, who gave me accurate advice with regard to English translation, and Yoshiko Tsukada and Hanayo Kawate who have supported publishing efforts of this report. Thank you.

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Reference

- Adelman, D.S. and Legg, T.J. (2009). *Disaster Nursing. A Handbook for Practice*. Ontario, Jones and Bartlett Publishers.
- Bouda Kaori, Yokouchi Mitsuko, Okada Junko, Fujimoto Hiroko, Nakanobu Rieko, Hori Rie, Ueda Kikuko (2007) .Educational Issues Based on the Results of Disaster Triage Training for Nursing Students. *Journal of Japan Society of Disaster Nursing*, 9(2),25-39.
- Hata Kiyomi (2008) .Developing a Disaster Nursing Educational Program Based on the Experiential Learning Theory. *Journal of Japan Society of Disaster Nursing*, 9(3),10-23.
- Hyakuta Takeshi, Nakanobu Rieko (2011) .Effect and Future Task of “ The Practice for the Simulated Shelter Experience” . *Bulletin of Japanese Red Cross Hiroshima College Nursing*, 11. 1-9
- University of Hyogo, Graduate School of Nursing Research Institute of Nursing Care for People and Community (2008). A Report - The 21st Century Center of Excellence Program- Development of a Center of Excellence for Disaster Nursing in a Ubiquitous Society-.
- The International Nursing Foundation of Japan, (1999) . *International Disaster Nursing Manual*. Tokyo, Sinko Trading Company Ltd., Publication Department of Medical Books.
- Matsunaga Hitomi (2010) .Perception of Nurse Teachers about Nursing Skill Exercise in Disaster Nursing Education. *41th Japan Nurse Association Conference ; Nurse Education*, 205-208.
- Minami Hiroko, Yamamoto Aiko (2007) . *Textbook for Disaster Nursing ; Introduction*. Tokyo, Japanese Nursing Association Publishing Company, Ltd.
- Minami Hiroko, Yamamoto Aiko (2007) . *Textbook for Disaster Nursing ; Practice*. Tokyo, Japanese Nursing Association Publishing Company, Ltd.
- Miura Mayumi, Ohara Mariko, Ito Takako, Kuroda Yuko, Sakai Akiko, Yamazaki Tatsue, Itagaki Chikako (2009) .Present State of Disaster Nursing Education of the Nursing University in Asia Region. *Journal of Japan Society of Disaster Nursing*, 10(3)、 29-35.
- Mori Namiko (2009) .Investigations of Nurses’ Readiness and Continuing Education for Biological Disaster. *Japanese Journal of Disaster Medicine*, 14, 164-173.
- Nakamura Ayako, Ibe Toshiko, Kuraoka Ymiko, Oku Hiromi (2011) .The Pilot of the Disaster Nursing Education in the Health Care Delivery System II , *Bulletin of St. Luke’s College of Nursing*, 38, 44-51.
- Nakanobu Rieko, Ueda Kikuko (2008) .Experimental Learning of Students Simulated Casualties in Triage Practice. *Journal of Japan Society of Disaster Nursing*, 10(2), 13-25.
- Japanese Red Cross Society, Operations Sector, Nursing Department (2012) . *Disaster Nursing /International Activity in Nursing*. Tokyo, Igaku-Shoin
- Nonaka Hiroshi (2008) . *Practice ! Disaster Nursing How Do Nurses Respond*. Tokyo, Shorinsha
- Ohara Mariko ed. (2008) . *Disaster Nursing Save Lives and Mind*. Tokyo, Gakken.
- Ohara Mariko, Sakai Akiko ed. (2012) . *Disaster Nursing; Basic Knowledge to Understand 2nd .ed.* Nanzando.
- Oyama Toshiko, Tanigishi Etsuko, Yamamoto Shoko, Iwata Midori, Misawa Toshimi, Imai Ieko, Ohara Mariko, Kubo Kyoko, Sakai Akiko, Oikawa Yuko (2010) .Instructional Contents of Basic Disaster Nursing Education Based on the Characteristics of Disaster Victims. *Journal of Japan Society of Disaster Nursing*, 12(2),51-66.
- Ozaki Miche (2010) .Learning Effect of Disaster Relief Activity Simulation in Basic Nursing Education. *Bulletin of college of nursing Ibaraki Christian University*, 2(1), 3-10.
- Powers, R. & Daily E. (2000). *International Disaster Nursing*. Cambridge, Cambridge University Press,
- Sakai Akiko, Kikuchi Shizuko(2008). *Disaster Nursing*. Tokyo, Nankodo.
- Sakurai Shinobu (2011) Trend and Issue of Disaster Nursing Research from Overseas Literature Review, *Mie Nursing Journal*, 13, 1-7.
- Veenema ,T.G. ed. (2003). *Disaster Nursing and Emergency Preparedness for Chemical, Biological, and Radiological Terrorism and Other Hazards*. New York, Springer Publishing Company.
- Veenema ,T.G.(2006). *Ready RN. Handbook for Disaster Nursing and Emergency Preparedness. 2nd ed.* St. Louis, Mosby Elsevier.
- Yamamoto Aiko (2006) .Promoting Preparedness for Disaster—Recommendation from Disaster Nursing — . *Journal of Japan Society of Disaster Nursing*, 8(2)、 2-7.

Appendices

A Survey on the Current Situation of Disasters and Disaster Nursing Education in Asian Universities
Call for Participation in Our Survey

My name is Ikumi Sasaki, Professor at the Japanese Red Cross College of Nursing. We are currently conducting a survey on the scope of and problems related to “disasters” or “disaster nursing” education in Asian universities. This survey is called “A Survey on the Current Situation of Disasters and Disaster Nursing Education in Asian Universities.”

Many people have long recognized a need for teaching methods and specialized curricula given that disasters have occurred frequently in Asia. It is part of the “Program for Strategic Research Foundation at Private Universities”, which aims to create a research base in Asia dedicated to “disasters” and “disaster nursing” education in the Asian region. We will survey colleges of nursing from sixteen Asian countries including Japan. We aim to deepen our understanding of the education curricula and teaching methods at each institution. We ask for your kind cooperation.

After sending out a formal request to the principle of your college, we have been referred to you. We kindly ask that you please fill out the survey on behalf of your nursing program.

Participation in this questionnaire is strictly voluntary. Filling out and returning the survey means that participants have read and understood the terms of this project. Completed surveys can be sent back to us through the international post mail or via email to survey-d@redcross.ac.jp.

The questionnaire can be filled out anonymously. The last page of the questionnaire asks for your personal information. This is strictly for the purpose of forming a network. Filling out this section is strictly voluntary; it may be left blank. If the questionnaire is sent via email a record of the email address will not be kept. All information collected from the questionnaire will be converted into statistics. All collected individual personal information as well as any statistical data derived from the survey will be kept secure in a locked cabinet.

Portions of the findings from this project will be presented in academic conferences and journals as well as be placed on the Japanese Red Cross College of Nursing website.

We look forward to receiving the filled out questionnaire. Thank you in advance for your cooperation.

This questionnaire takes about 30 minutes to fill out.

Research Organization:
Principal Investigator : Ikumi Sasaki (The Japanese Red Cross College of Nursing)
Co-Investigators : Mariko Ohara (The Japanese Red Cross College of Nursing)
Hiroshi Higashiura (The Japanese Red Cross College of Nursing)
Tomoko Nishida (The Japanese Red Cross College of Nursing)
Nahoko Okamoto (The Japanese Red Cross College of Nursing)

Please answer the following questions. Please either mark with an or circle the appropriate number. In the blank space provided, please give detailed and relevant examples.

I . Does your institution cover the subject areas of “Disasters” or “Disaster Nursing” in the curriculum?

1 . YES → “Disasters” or “Disaster Nursing” is taught:

(1) as an independent subject/course

(2) in other subjects/courses

→ Please move on to section II of the questionnaire.

2 . NO → Please move on to section VI of the questionnaire.

II . Please fill out the form concerning the subject, and circle where appropriate.

	Subject/ Course Title	Grade	Credits	Hours	Compulsory/ Elective	Type of Class	Content
1				Hours	①Compulsory ②Elective	①Lecture ②Seminar ③Practical ④Other ()	
2				Hours	①Compulsory ②Elective	①Lecture ②Seminar ③Practical ④Other ()	
3				Hours	①Compulsory ②Elective	①Lecture ②Seminar ③Practical ④Other ()	
4				Hours	①Compulsory ②Elective	①Lecture ②Seminar ③Practical ④Other ()	
5				Hours	①Compulsory ②Elective	①Lecture ②Seminar ③Practical ④Other ()	

III . When did you first introduce “Disasters” or “Disaster Nursing” education into your curricula?

YEAR:

IV. Please check off the list below.

Educational Content for Disasters and Disaster Nursing		Topic Covered ✓
Basic Knowledge Related to Disaster Nursing	Definition of Disasters, History of Disasters, Different Types of Disease Structure in Disaster	
	Cycle of Disasters	
	Disaster Management	
	Information Gathering During Disaster	
	Laws and Regulations regarding Disasters	
	National Policy on Disaster Prevention , Mitigation and Preparedness	
	Ethics and Disasters	
	Evaluation and Assessment of Different Cultures in Disaster	
	Gender Issues	
	Volunteering in Disaster Affected Areas	
	Medical Care and Disaster Nursing Defined	
	Definition and Types of Vulnerable Group	
	Role of Disaster Nursing	
Disaster-based Care	Natural Disasters	
	Man-made Disasters (airplane accident, train accident)	
	NBC Disaster: Nuclear, Biological, Chemical Disasters	
	Terrorism	
Psychological Care During a Disaster	Basics of Psychological and Social Care for Victims (Stages of Psychological Distress)	
	Psychological Triage	
	Coordination between Psychiatrists	
	Psychological Care for Children	
	Psychological Care for the Elderly	
	Care and Stress Management for Relief Effort Staff	
Specific Care for Each Vulnerable Groups	Children	
	Pregnant Women and Women in Child Care	
	Elderly	
	Person with a Chronically ill	
	Physically Handicapped	
	Personality Disorder Patients	
	Mentally Handicapped	
	Minorities	
Theory and Research of Disaster Nursing		

Educational Content for Disasters and Disaster Nursing			Topic Covered ✓
Disaster Cycle-Based Nursing	Silent Phase (Disaster Prevention, Reduction, and Mitigation)	Hazard Map	
		Safety Confirmation and Evacuation Behavior	
		Community Assessment	
		Warning System	
		Basics of Disaster Prevention (Self-help, Mutual Help, Public-help)	
		Community Disaster Prevention	
		Hospital Disaster Prevention	
		Handbook for Disaster Prevention	
		Education and Training for Disaster Prevention	
		Disaster Nursing Education	
		Coordination with Other Professions	
	Acute Phase	Difference Between Emergency Medicine and Disaster Medicine	
		Medical and Nursing Needs	
		Structure of CSCA3T	
		Basics and Methods in Triage	
		Initial Response and the Role of Nursing in Disaster-affected Hospital	
		Role of Nursing in Setting Up and Operating First-aid Station	
		Role of Nursing at Mobile Clinic	
		Assessment of Evacuation Center	
		Coordination with Other Professions	
		Emergency Care and Nursing During Acute Phase (Treatment of Crash Syndrome and External Wounds)	
	Middle- and Long-term Phase	Definition of Reconstruction	
		Daily Life Support for Victims	
		Support for Community Reconstruction and Coordination between Different Professions	

V. Please answer the following questions about the personnel who teach “Disasters” or “Disaster Nursing” at your school.

1. The number of personnel who teach “Disasters” or “Disaster Nursing”. people

2. Please answer the following questions to **the person in charge** who teaches “Disasters” or “Disaster Nursing” at your school.

1) Country

- | | | | |
|--|---|--|--|
| <input type="checkbox"/> (1) <u>Bangladesh</u> | <input type="checkbox"/> (2) <u>Cambodia</u> | <input type="checkbox"/> (3) <u>China</u> | <input type="checkbox"/> (4) <u>India</u> |
| <input type="checkbox"/> (5) <u>Indonesia</u> | <input type="checkbox"/> (6) <u>Korea</u> | <input type="checkbox"/> (7) <u>Malaysia</u> | <input type="checkbox"/> (8) <u>Myanmar</u> |
| <input type="checkbox"/> (9) <u>Nepal</u> | <input type="checkbox"/> (10) <u>Pakistan</u> | <input type="checkbox"/> (11) <u>Philippines</u> | <input type="checkbox"/> (12) <u>Singapore</u> |
| <input type="checkbox"/> (13) <u>Taiwan</u> | <input type="checkbox"/> (14) <u>Thailand</u> | <input type="checkbox"/> (15) <u>Vietnam</u> | |

2) Age

- | | | | |
|---|------------------------------------|------------------------------------|------------------------------------|
| <input type="checkbox"/> (1) 20~24 | <input type="checkbox"/> (2) 25~29 | <input type="checkbox"/> (3) 30~34 | <input type="checkbox"/> (4) 35~39 |
| <input type="checkbox"/> (5) 40~44 | <input type="checkbox"/> (6) 45~49 | <input type="checkbox"/> (7) 50~54 | <input type="checkbox"/> (8) 55~59 |
| <input type="checkbox"/> (9) more than 60 | | | |

3) Gender

- | | |
|-----------------------------------|-------------------------------------|
| <input type="checkbox"/> (1) Male | <input type="checkbox"/> (2) Female |
|-----------------------------------|-------------------------------------|

4) Number of years of experience as a nurse

- | |
|--|
| <input type="checkbox"/> (1) Less than 1 year |
| <input type="checkbox"/> (2) 1 year – less than 3 years |
| <input type="checkbox"/> (3) 3 years – less than 5 years |
| <input type="checkbox"/> (4) 5 years – less than 10 years |
| <input type="checkbox"/> (5) 10 years – less than 20 years |
| <input type="checkbox"/> (6) 20 years and more |

5) What is the area of expertise of the instructor? Please tick off the relevant boxes.

- | | |
|--|--|
| <input type="checkbox"/> (1) Disaster Nursing | <input type="checkbox"/> (2) Nursing Ethics |
| <input type="checkbox"/> (3) Nursing Informatics | <input type="checkbox"/> (4) Infection Control Nursing / Infectious Diseases Nursing |
| <input type="checkbox"/> (5) Nursing Theory | <input type="checkbox"/> (6) History of Nursing |
| <input type="checkbox"/> (7) Nursing Skills / Nursing Arts | <input type="checkbox"/> (8) Pediatric Nursing |
| <input type="checkbox"/> (9) Maternal Nursing | <input type="checkbox"/> (10) Gerontological Nursing |
| <input type="checkbox"/> (11) Perinatal Nursing | <input type="checkbox"/> (12) Critical Care Nursing |
| <input type="checkbox"/> (13) Chronic Nursing | <input type="checkbox"/> (14) Cancer Nursing |
| <input type="checkbox"/> (15) Rehabilitation Nursing | <input type="checkbox"/> (16) Community Health Nursing |
| <input type="checkbox"/> (17) Home Care Nursing | <input type="checkbox"/> (18) Psychiatric Mental Health Nursing |
| <input type="checkbox"/> (19) International Nursing | <input type="checkbox"/> (20) Nursing Administration |
| <input type="checkbox"/> (21) Nursing Education | |
| <input type="checkbox"/> (22) Other () | |

6) Title

- | | | |
|--|--|--|
| <input type="checkbox"/> (1) Professor | <input type="checkbox"/> (2) Associate Professor | <input type="checkbox"/> (3) Instructor/Lecturer |
| <input type="checkbox"/> (4) Assistant Professor | <input type="checkbox"/> (5) Other () | |

7) What degree does the instructor hold?

- (1) Doctoral degree
- (2) Master's degree
- (3) Bachelor's degree
- (4) Other ()

8) Please tick off all the certifications that the instructor has.

- (1) Nurse
- (2) Midwife
- (3) Public Health Nurse
- (4) Other ()

9) Has the instructor had disaster experience?

- (1) YES → What kind of disaster?

(2) NO _____

10) Has the instructor ever participated in relief activities?

- (1) YES → What kind of activity?

(2) NO _____

11) How long has the instructor been teaching “disasters” or “disaster nursing”?

- (1) Less than 1 year
- (2) 1 year – less than 3 years
- (3) 3 years – less than 5 years
- (4) 5 years – less than 10 years
- (5) 10 years – less than 20 years
- (6) 20 years and more

VI. Should “Disasters” or “Disaster Nursing” be a compulsory course/subject?

- (1) YES (“Disasters” and/or “Disaster Nursing” should be compulsory)
- (2) Undecided
- (3) NO (Neither “disasters” nor “disaster nursing” should necessarily be compulsory)

VII. At the moment, do you have any opportunity to provide “Disasters” or “Disaster nursing” education?

- (1) Lectures
- (2) Seminars
- (3) Special speaker sessions
- (4) None

VIII. Do you plan to teach “Disasters” or “Disaster Nursing” in the future ?

(1) YES → What kind of content do you plan to cover?

(2) NO

IX. Do you know about the ICN (International Council of Nurses) Framework of the Disaster Nursing Competencies?

- (1) YES
- (2) NO

X. What issues does your institution/instructors face when teaching “Disasters” or “Disaster Nursing”? (Multiple answers are accepted.)

- No textbook available
 - No equipment to simulate disaster
 - No syllabi available
 - Lack of funding for teaching “Disasters” and “Disaster Nursing”
 - No appropriate teaching materials available
 - Lack of qualified instructors
 - Have no experience in disaster relief
 - Instructors do not have time to go to study seminars
 - Lack of domestic and/or international network
 - Lack of the public’s familiarity with “Disasters” or “Disaster Nursing”
 - No support from other divisions/departments
 - Lack of committed support from the university
 - The course covers only the emergency phase, but does not cover whole disaster cycle.
 - Others → Please specify
-

XI. Are there programs focusing on “Disasters” and “Disaster Nursing” that aimed to promote international exchanges between universities?

(1) YES

→ Please briefly describe the programs.

(2) NO

→ Are there any problems that prevent such programs from being developed?

XII. Does your institution want to participate in exchanges with other universities?

(1) YES

→ Please specify what kinds of event, group work, or exchanges you would like to have.

(2) NO

X III. Please write any comment/opinion regarding “Disasters” or “Disaster Nursing” education.

Request:

Filling out this section is strictly voluntary; it may be left blank. If your institution has any interest in taking part in events promoting curricula for nurses' education and first aid in times of natural disasters or participating in the Asia regional network centered around the Japanese Red Cross University, then we ask you to please fill out the contact information below. Information of either the individual who filled out this form or the person who will hence forth represent the participating institution during correspondences with the Japanese Red Cross College of Nursing is acceptable. We will only use this contact information for the above mentioned purposes.

Your name: _____

Affiliation : _____

Area of Specialization/Status as Faculty : _____

e-mail address : _____ @ _____

Telephone : _____

Address : _____



The questionnaire is complete. Please check whether all relevant sections have been filled out. Thank you.



Your cooperation is greatly appreciated.

March, 2013

To whom it may concern,

A Survey on the Current Situation of Disasters and Disaster Nursing Education in Asian Universities

The Japanese Red Cross College of Nursing is conducting a survey at Asian universities that have Departments of Nursing Education or other programs aimed at training nurses. The survey focuses on university curricula regarding “disasters” or “disaster nursing” and aims to create a research base dedicated to disasters and nursing education in the Asian region. This survey is supported by the Program for the Strategic Research Foundation at Private Universities and is funded by the Japanese Ministry of Education, Culture, Sports, Science and Technology.

Many people have long recognized a need for teaching methods and specialized curricula given that natural disasters have occurred frequently in Asia. In 2007, the Japan Natural Disaster and Nursing Association conducted a survey among eleven universities and found that curricular development and implementation in the areas of “disasters” or “disaster nursing” were still at an early stage of development. Our current survey aims to update this data taken six years ago. Special attention is paid to curricular content, teaching methods, specific problems that nurses face in times of disasters, and further issues that must be resolved.

This year we will ask some universities at sixteen countries in Asia to complete our survey. Please see attached sheets for details. We greatly appreciate your understanding and cooperation.

Sincerely,

Ikumi Sasaki
Professor of Nursing Education,
Japanese Red Cross College of
Nursing

I. Our Request:

We ask that each participating institution choose a representative to fill out the survey for this project. Please give the attached survey/questionnaire to appropriate persons within the Department of Nursing. Faculty who teach courses on “disasters” or “disaster nursing” would be most appropriate. The completed survey may be sent back to us by air mail (a return envelope is included) or electronically. If returning by email, please download the electronic version of the form from our website and send it to: survey-d@redcross.ac.jp

Thank you in advance for your cooperation.

II. Our Policy:

1. Research Method:

Questionnaire survey.

2. Voluntary Cooperation Clause:

Participation in this study is strictly voluntary. Filling out and returning the survey means that participants have read and understood the terms of this project.

3. Confidentiality:

All collected information will be used strictly for research and no other purposes.

4. Privacy and Information Protection:

The last page of the questionnaire asks for personal information such as the name, affiliation, status, and contact information of the participant. Filling out this section is strictly voluntary; it may be left blank. Also, if this questionnaire is filled out and sent via email, the email address of sender will immediately be erased from our records. The purpose of the last page is to get a personal contact to maintain a network between the Japanese Red Cross College of Nursing and the participating institution. This information collected will be kept separate from other statistical data collected in the survey/questionnaire. All collected individual personal information as well as any statistical data derived from the survey will be kept secure in a locked cabinet.

5. Benefits and Drawbacks of Participation in this Research:

Each institution has its own strategies to deal with nursing in times of disaster based on the characteristics of that community or country. By participating in this study, curricular content, teaching methods, and further issues will become clearer for each institution. Thus participation provides excellent opportunity to survey its current curricula and obtain feedback about issues that nurses face in times of disasters. Furthermore, specific curricula and strategies of each community or country will be collected and put into a central database that can be used later for research.

The project will provide valuable information to establish the center for training/education on disaster nursing at the Japanese Red Cross College of Nursing. Such a center will benefit not only one country, but the Asian region as a whole.

Participation in the research may pose problems for some institutions. Participation is strictly voluntary. If need be, the participating institution may at any time ask for clarification about parts of the survey/questionnaire. The Japanese Red Cross College of Nursing will have a project representative address such issues.

6. Future Use of Information:

Portions of the findings from this project will be presented in academic conferences and journals as well as be placed on the Japanese Red Cross College of Nursing website.

7. Ethical Considerations:

This project will be commence only after it has been approved by the Ethics Review Committee of the Japanese Red Cross College of Nursing, Japan (Reference Number 2012-89).

8. Research Organization:

Principal Investigator: Ikumi Sasaki (Japanese Red Cross College of Nursing)

Co-Investigator: Mariko Ohara (Japanese Red Cross College of Nursing)

Hiroshi Higashiura (Japanese Red Cross College of Nursing)

Tomoko Nishida (Japanese Red Cross College of Nursing)

Nahoko Okamoto (Japanese Red Cross College of Nursing)

9) Contact Us:

Please address inquires to

Ikumi Sasaki

email: survey-d@redcross.ac.jp

**This project is the Supported Program for the Strategic Research Foundation at
Private Universities of Ministry of Education, Culture, Sports, Science and Technology.**