

# **Disaster Nursing Education Project**

**Duration: 1<sup>st</sup> April, 2011 ~ 31<sup>st</sup> March, 2014**

**Representative of the Project: Hiroshi Higashiura (Prof.)**

**Japanese Red Cross College of Nursing**



## **Disaster Nursing Education Project**

### **Background of the Project**

As of April 1st, 2014, there were 234 Faculties of Nursing at Nursing Colleges and/or Universities in Japan<sup>1)</sup>. The special characteristics of the Japanese Red Cross College of Nursing are as follows:

- a. Networking among International Committee of the Red Cross, International Federation of Red Cross and Red Crescent Societies and 189 National Red Cross/Red Crescent Societies.
- b. The Japanese Red Cross Society, the parent body of the Japanese Red Cross Academy, has been deeply involved with disaster relief and support activities and medical and health development programs in developing countries through Red Cross/Crescent Societies.
- c. The Japanese Red Cross College of Nursing offers 120 hours of disaster nursing subjects in its Bachelor program, and has set up International / Disaster Nursing Studies in its Master and Doctoral programs.

Building on these characteristics, and in order to contribute to the international development of disaster nursing education, the project applied to the Ministry of Education, Culture, Sports, Science and Technology's Strategic Research Foundation at Private Universities in January 2011. Soon after, on March 11, 2011, the Great East Japan Earthquake (GEJE) struck.

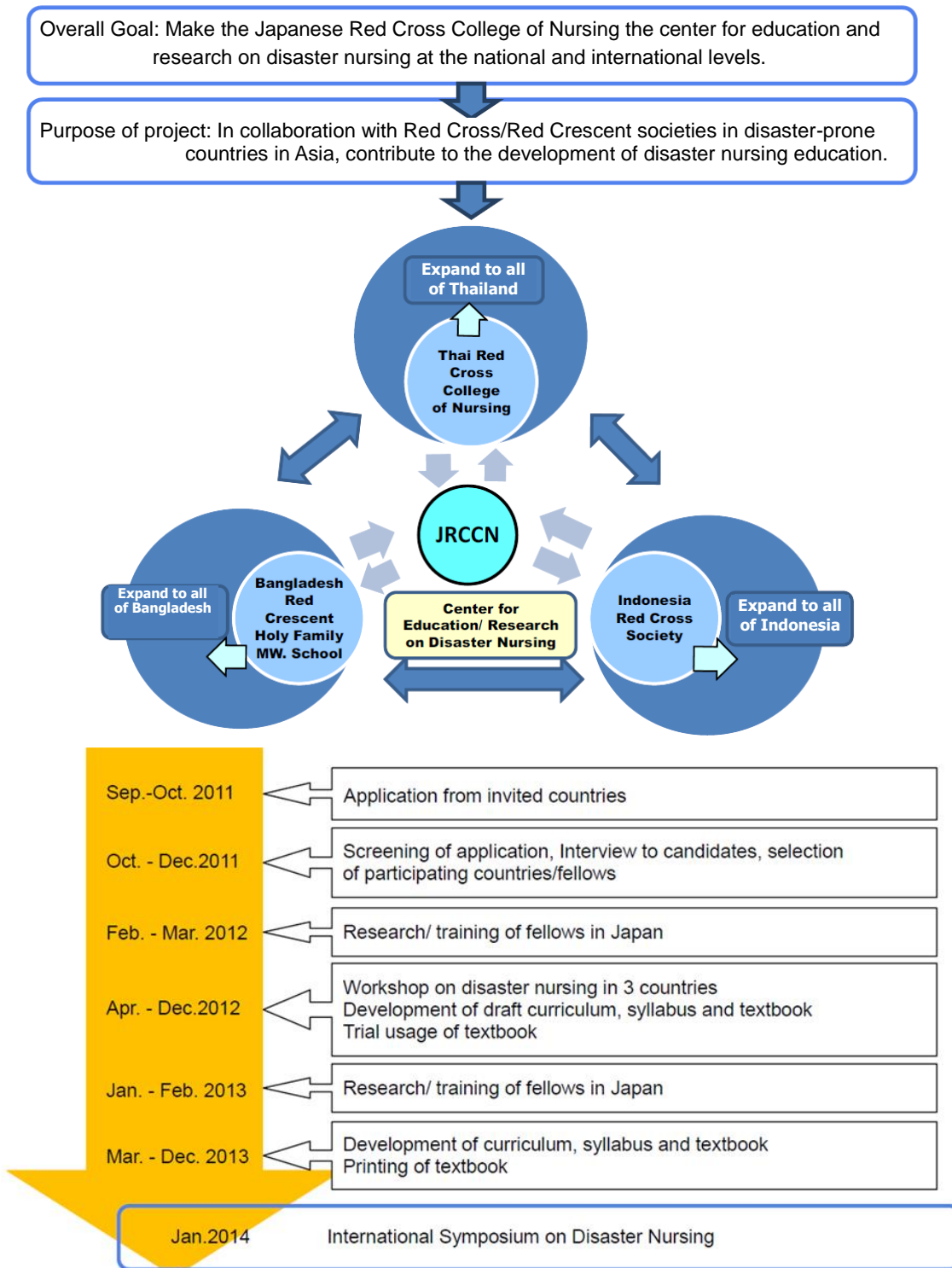
In this project, four research projects related to the March 11 earthquake and one research project, "Development of Disaster Nursing Education in Disaster-prone Countries in Asia," were implemented over three years. Research outcomes and results of these five research projects were presented at national and international conferences 25 times over the past three years.

### **Outline of Research**

#### **1) Purpose, Significance and Outline**

In 2005, the 2<sup>nd</sup> UN World Conference on Disaster Reduction (WCDR) approved the Hyogo Framework for Action (HFA) 2005-2015 aimed at "Building Resilience of Nations and Communities to Disaster." One action countermeasure was to build a structure of self-help and mutual help. That means that disaster-prone countries should strengthen disaster relief organizations and human resources in line with their own culture. At present, only a handful of colleges/universities offer disaster nursing research and educational training internationally. In this regard, there is an urgent need

to develop contents and methods of disaster nursing education for nurses, midwives and public health nurses, who play important roles in disaster relief. The overall goal of the project was to make the Japanese Red Cross College of Nursing a center for education and research on disaster nursing at the national and international levels.



**2) Domestic activities: Four research projects related to the Great East Japan Earthquake by JRCCN faculty members**

**Theme 1: Current Status of Disaster and Disaster Nursing Education in Asian Countries** (Project representative: Prof. Ikumi Sasaki (Nursing Education))

Aim and Significance:

The first aim is to clarify the content of disaster nursing education and the current status of nursing universities in Asian countries through a literature review. The second aim is to clarify issues in disaster nursing education through a survey of nursing universities in Asian countries

Research result:

A literature review and questionnaire survey were implemented. The result was reported in Japanese and English in a booklet and the following URL. <http://www.redcross.ac.jp/about/strategy.html>

**Theme 2: Study on prevention of secondary PTSD for care providers in disasters, focused on the Great East Japan Earthquake** (Project representative: Prof. Asako Takei (Mental Health Nursing))

Aim and Significance

This study aims to grasp the actual experiences of nurses who participated in relief activities after the March 11 earthquake and to develop necessary countermeasures and educational methods to prevent PTSD. Through this research, risk factors for secondary PTSD for medical team members dispatched for disaster relief will be clarified, and the project will provide basic information for prior education to prevent PTSD and a follow-up system after disaster relief activities.

Research result:

Thirteen nurses who took part in relief activities after the earthquake agreed to participate in interviews and became research participants. The result was reported in Japanese. <http://www.redcross.ac.jp/about/strategy.html>

**Theme 3: Support for Individuals with Chronic Illness or Disability during the Great East Japan Earthquake** (Project representative: Prof. Keiko Honjo (Adult Nursing))

Aim:

- 1) To describe what individuals with chronic illness or disability experienced after the Great East Japan Earthquake
- 2) To describe nursing support (direct support, cooperation with community and network support) for individuals with chronic illness or disability during a disaster



Research result:

Analysis of newspaper articles between March 11, 2011 and March 31, 2012 using a search database was reported in Japanese and English at this URL. <http://www.redcross.ac.jp/about/strategy.html>

**Theme 4: Study on enhancing the physical functions of the elderly affected by the Great East Japan Earthquake** (Project representative: Associate Prof. Chieko Greiner (Gerontological Nursing))

Aim:

This study aims to create exercise programs for enhancing the physical functions of elderly persons affected by the Great East Japan Earthquake and clarify their effect. Implementation of such programs helps prevent the elderly from becoming shut-ins, promote and/or maintain their physical functions, and prevent torpidity syndrome. It helps elderly persons affected by disaster to live long, independent lives.

Research result:

Of the 45 participants, 27 were still participating in exercise classes six months later and the programs' effects on these 27 individuals were analyzed. Twenty-six participants were female and one was male. Their average age was 70.1 (SD=5.0).

Four items were analyzed before participants joined the class, three months after joining the class, and six months after joining the class. The result was assessed for significance compared to before and after the exercises with the following three items: Functional Reach Test ( $p=.000$ ), time able to stay standing on one foot ( $p=.007$ ), and sitting and standing up from a chair ( $p=.000$ ). Regarding the Timed Up & Go Test, no significant difference was recognized. Thus, the aim of the study was achieved.

### **3) Activity overseas: One research project in Asia**

**Theme: Development of Disaster Nursing Education in disaster-prone countries in Asia** (Project representative: Prof. Hiroshi Higashiura (International /Disaster Nursing))

Aim:

To support development of disaster nursing education in target countries in Asia, four major activities will be implemented. 1. Compilation of a Disaster Nursing Textbook. A workshop will be held for administrators, disaster nursing teachers, and disaster-related clinical staff, to deepen their understanding of disaster nursing activities. An editorial committee will be established to compile the textbook. 2. Arranging a Disaster Nursing Syllabus and Curricula in nursing education. 3. Developing disaster nursing educational materials. 4. Conducting disaster-related research by researchers.

Method:

Three support countries were selected, namely Bangladesh, Indonesia and Thailand. Two researchers from each country were nominated by their respective Red Cross or

Red Crescent societies. They visited JRCCN and participated in disaster nursing training once a year for three years. Also, JRCCN researchers were dispatched to support and advise on activities in the three countries. The results of research activities were disseminated throughout the three countries through academic conferences, disaster nursing training, and the distribution of disaster nursing textbooks.

### **Researchers from the three countries:**

#### Bangladesh

Ms. Sonali Rani Das, Midwifery teacher, Bangladesh Red Crescent Society (BDRCS) attached Nursing School and Auxiliary Midwifery School

Mr. Abdul Karim, BDRCS, Primary Health Care Field Coordinator

#### Indonesia

Mr. Mahfud, Nurse, Indonesia Red Cross Society, Health Department

Mr. Habib Priyono, Psychotherapist, Researcher, Risk Management Center, Bogor Hospital, IRCS

#### Thailand

Ms. Wanpen Inkaew, Associate Prof., Thai Red Cross College of Nursing (Community Nursing)

Ms. Somjinda Chompunud, Instructor, Thai Red Cross College of Nursing (Community Nursing)

These researchers conducted research on the themes below:

Bangladesh: Mr. Mir Abdul Karim: Organizing Communities in Disaster Prevention

Ms. Sonali Rani Das: Assessment of Health Impact after Cyclone Aila in Bangladesh

Indonesia: Mr. Habib Priyono: Research on Disaster Nursing from the Perspective of Nursing Students and Lecturers

Thailand: Ms. Somjinda Chompunud: Health Impact and Adaptation of the Elderly Affected by Floods in Ladkrabang District, Bangkok

Ms. Wanpen Inkaew: The Effect of Interactive Teaching Methods on Achievement and Prevention-Mitigation, Preparedness and Response Competencies of Undergraduate Nursing Students based on the International Council of Nurses (ICN) Framework of Disaster Competencies

### **Result:**

Four major activities were completed as planned: 1. Compilation of Disaster Nursing Textbook. 2. Arranging Disaster Nursing Syllabus and Curricula in nursing education. 3. Developing disaster nursing educational materials. 4. Conducting disaster-related research by researchers.

### **The overall project achieved an excellent outcome**

a. Researchers of the Japanese Red Cross College of Nursing oriented and facilitated disaster nursing education for the 1st year with other researchers in the three Asian countries. By the 2nd year, the researchers could put what they learnt in Japan into practical use in each country. For example, in 2012, Thai researchers succeeded in producing disaster nursing educational materials and e-learning programs at a reasonable price in Thailand. They implemented a “model lecture” by using those materials, and researchers from other countries, including Japan, attended. This epoch-making chance motivated Bangladesh and Indonesian researchers to learn how to apply Japanese methods to their own countries.

b. When researchers from the three countries visited the JRCCN, an International Seminar on Disaster was held several times every year, inviting speakers involved with international conflicts and disaster relief. This provided positive inspiration for the researchers and strengthened their motivation to become disaster nursing experts.

c. JRCCN faculty members deepened understanding that disaster nursing could be applied to people of all ages and health conditions, through exchanging opinions and information with researchers of the project and speakers of international seminars over three years, enhancing their motivation toward disaster nursing research and education.

### **Issues going forward**

The sustainability of disaster nursing activities by researchers in the three countries and how JRCCN can continue to support these countries are issues going forward.

### **Outcomes of the project and perspectives**

Researchers in the three countries became recognized as disaster nursing experts and received requests to give lectures at nursing associations and nursing schools. They also actively attended national and international disaster-related seminars, workshops, academic conferences and volunteer activities. These activities will definitely communicate the necessity of disaster nursing education. As disaster nursing was introduced in the nursing curriculum at nursing schools or colleges where the researchers in the three countries work, this specific program will be recognized as their strength in the nursing society of the three countries.

### **International Symposium**

A two-day International Symposium was held at JRCCN on January 24 and 25, 2014. Disaster nursing education was the topic covered on the first day. Researchers from four countries (Bangladesh, Indonesia, Japan and Thailand) did a presentation about how they were able to achieve their aims of 1) compiling a disaster nursing textbook; 2)

arranging to include disaster nursing in syllabi and curricula; and 3) creating disaster nursing educational materials.

Next, a symposium took place with speakers from Bangladesh, Indonesia and Thailand, and JRCCN actively participated. The speakers were Prof. Dr. Mohammad Serajul Akbar, MP, Chairman of Bangladesh Red Crescent Society, Dr. Elsi Dwi Hapsari, B.N., M.S., D.S., Assistant Prof., Gadjah Mada Univ., Prof., Dr. Varunyupa Roykulchareon, President of the Thai Red Cross College of Nursing and Prof. Hiroshi Higashiura and Prof. Dr. Mariko Ohara from JRCCN. Mr. Jim Canjanapokin, Regional Health Coordinator, International Federation of the Red Cross and Red Crescent Societies, Kuala Lumpur, chaired the symposium.

Researchers from Bangladesh, Indonesia and Thailand described the process of compiling a textbook with effective cooperation from JRCCN. The textbooks and educational materials were displayed in the symposium hall. At the symposium, JRCCN speakers described disaster nursing education, with 120 hours of instruction in the Bachelor program, and International-Disaster Nursing in the Master and Doctoral programs.

Speakers from Bangladesh, Indonesia and Thailand noted that disaster nursing education must be promoted and that more teachers need to be educated in theory and in the field ahead of time. A common issue noted was the difficulty for nursing students to gain experience in the disaster nursing field. About 90 participants attended the symposium.

All speakers and audience appreciated the opportunity to exchange information about disasters and disaster nursing education among disaster-prone countries in Asia.

## **V. Wrap-up of the five research activities of the project**

Under the aims of the project, the Japanese Red Cross College of Nursing achieved an international network on disaster nursing education as follows:

1. Having conducted the survey on "The Current Situation of Disaster and Disaster Nursing Education in Asian countries", information exchanges have continued with colleges and universities in Asia that responded to the survey.

2. The project representative, Prof. Hiroshi Higashiura (International / Disaster Nursing field), together with Ms. Nahoko Okamoto, Ph.D., lecturer, implemented joint research with the international NGO Help Age International engaged with issues affecting the elderly throughout the world, on issues affecting the elderly in the Great East Japan Earthquake and submitted a report titled "Displacement and Older People" in January 2014.

<http://www.helpage.org/what-we-do/emergencies/displacement-and-older-people/keywords=Japan>, [http://www.sure.co.jp/jrc/ihs/journal\\_03/index.html](http://www.sure.co.jp/jrc/ihs/journal_03/index.html)

3. The project representative, Prof. Hiroshi Higashiura (International / Disaster Nursing field) set up a study meeting on the Great East Japan Earthquake and international humanitarian assistance for two years, from November 2012 to December 2014, because the loss and damages caused by the Great East Japan Earthquake were immense and left many lessons to be learned by entities ranging from the national government to the local authority level.

Specifically, how to receive international assistance during a disaster was one of critical issues. To ensure better preparedness for future disasters, ministry officials, national and international designated public institutions, academic personnel of universities, and staff from NGOs/NPO participated voluntarily at the individual level. The report of the study was issued as “Recommendations” for the 3<sup>rd</sup> UN World Conference on Disaster Reduction in Sendai in March, 2015.

<http://www.sure.co.jp/jrc/pdf/20140313.pdf>

[http://www.sure.co.jp/jrc/ihs/journal\\_03\\_annex/index.html](http://www.sure.co.jp/jrc/ihs/journal_03_annex/index.html)

4. In May, 2014, the 1st Red Cross/ Red Crescent International Nursing Academic Conference on disaster nursing was held in Bangkok, Thailand. Prof. Hiroshi Higashiura contributed to organizing the conference as a planner and advisor. Outcomes of the project presented by JRCCN and TRCCN researchers there and in particular, JRCCN’s advanced disaster nursing programs, were evaluated very positively.
5. In 2011 when the project started, a Memorandum of Understanding (MoU) for academic exchanges among students and faculty members was exchanged with two universities (University of Colorado and **Swedish Red Cross University** College of Nursing). By March 2014, MoU were exchanged with three more colleges/ universities (Thai Red Cross College of Nursing, **Chulalongkorn** University, and La Source University (Lausanne, Switzerland). An additional two colleges/ universities are being nominated. All of them noted "Disaster Nursing Education of the JRCCN" as one of the major exchange programs.
6. In Bangladesh, a three-year "Community-based Disaster Prevention Health Activities" program was started in March 2014 by Prof. Mariko Ohara, Ph. D. and members of this project with Grants-in- Aid for Scientific Research from the Ministry of Education, Culture, Sports, Science and Technology, Japan. The counterpart is the Bangladesh Red Crescent Society, and the researchers are Mr. Abdul Karim and Ms. Sonali Rani Das, who are continuing their involvement which started with the Disaster Nursing Education Project.

7. In 2013, JRCCN inaugurated a Doctoral Program on International / Disaster Nursing, in addition to a Master Program.
8. A two-year Certified Nurse Specialist (CNS) Course, Master level program, was established in June, 2013. This project gave an impetus and the course was approved by the Japan Association of Nursing Programs in Universities (JANPU) at the Red Cross College of Nursing. The course is also being offered at two other colleges/ universities (Hiroshima Red Cross College of Nursing and Fukui University).
9. In April 2014, a "Disaster Nursing Global Leader Degree Program (DNGL)" was inaugurated. The Course is a five-year postgraduate program (Master and Doctoral programs) and credits are interchangeable among five colleges and universities (University of Kochi, University of Hyogo, Tokyo Medical and Dental University, Chiba University and the Japanese Red Cross College of Nursing (JRCCN)). The Disaster Nursing Education Project provided the foundation for offering the program at JRCCN.
10. Immediately after the Great East Japan Earthquake of March 11, 2011, faculty members, postgraduate students and undergraduate students were dispatched to disaster areas to support disaster victims, in response to requests by the Japan Red Cross Society and the Japanese Nursing Association. These activities in Japan will contribute to disaster relief activities overseas.

Above all, the Japanese Red Cross College of Nursing has developed into a center for disaster nursing research and an educational training center, on both the national and international levels.

1) <http://janpu.or.jp/kango/k06.html>

国際シンポジウム

International Symposium

「アジア地域における災害看護教育の現状と課題」

私立大学戦略的研究基盤形成支援事業

## Current Conditions and Issues of Disaster Nursing Education in Asian Region

The Supported Program for the Strategic Research Foundation at  
Private Universities of Ministry of Education, Culture, Sports, Science and  
Technology

日時:平成 26 年 1 月 24 日(金)~25 日(土)

Date: 24<sup>th</sup> (Fri.) Jan. & 25<sup>th</sup> (Sat.) Jan., 2014

場所:日本赤十字看護大学 広尾ホール

Venue: Hiroo Hall, Japanese Red Cross

College of Nursing

日本赤十字看護大

Japanese Red Cross College of Nursing



## International Symposium

“Current Conditions and Issues of Disaster Nursing Education in Asian Region”

24th (Fri.) Jan., 2014

13:30 Opening

13:35~13:45 Opening remarks by President of Japanese Red Cross College of  
Nursing Prof. Sanae Takada

13:45~14:00 Outline of Disaster Nursing Education Project  
Head of the project, Prof. Hiroshi Higashiura

14:00~15:00 Report on development of Disaster Nursing textbook  
Bangladesh Mr. Mir Abdul Karim, Ms. Sonali Rani Das  
Indonesia Mr. Habib Priyono, Mr. Mahfud  
Thailand Ms. Somjinda Chompunud, Ms. Wanpen Inkaew

15:00~15:15 Break

15:15~17:15 Symposium

Chairperson: Mr. Jim Catampongan

(Regional Health Coordinator, International Federation of the  
Red Cross and Red Crescent Societies, Kuala Lumpur,  
Malaysia)

Symposists:

“Current Conditions and Issues Related to Disaster Nursing Education in  
Nursing Colleges in Asia”

Prof. Ikumi Sasaki (Japanese Red Cross College of Nursing)

Bangladesh: Prof. Dr. Mohammad Serajul Akbar, MP.

(Chairman, Bangladesh Red Crescent Society)

Indonesia: Assistant Prof. Elsi Dwi Hapsari

(Gadjah Mada University)

Thai: Assistant Prof. Dr. Varunyupa Roykulchareon

(Director, Thai Red Cross College of Nursing)

Japan: Prof. Mariko Ohara

(Japanese Red Cross College of Nursing)

17:15 Closing



## International Symposium

“Current Conditions and Issues of Disaster Nursing Education in Asian Region”

25th (Sat.) Jan., 2014

10:00~12:00 Presentation on eight researches by the Fellow Researchers from Bangladesh, Indonesia and Thailand and Faculty members of Japanese Red Cross College of Nursing

Bangladesh Red Crescent Society

Mr. Mir Abdul Karim

Ms. Sonali Rani Das

Indonesian Red Cross Society

Mr. Habib Priyono

Thai Red Cross College of Nursing

Dr. Somjinda Chompunud

Assistant Prof. Wanpen Inkaew

Japanese Red Cross College of Nursing

Psychiatric Mental Health Nursing by Prof. Asako Takei

“Toward the Prevention of Secondary PTSD suffered by aid workers ”

Adult Health Nursing by Prof. Keiko Honjo

“The Experiences of, and Support for People with Chronic Illnesses and Disabilities during a Disaster – with Focus on the Great East Japan Earthquake”

Gerontological Nursing by Associate Prof. Greiner Chieko

“Effect of exercise program for elderly disaster victims of the Great East Japan Disaster”

# Opening Remarks

Sanae Takada

President of Japanese Red Cross College of Nursing

Ladies and gentlemen, good afternoon. Welcome to JRCCN. Today and tomorrow, over two days, we will be holding international symposium, as well as seminars. Today and in tomorrow's morning session, we will have presentations of the result of Disaster Nursing Education Project, which we received the subsidies from the Ministry of Education on the university strategic research fund to set up this strategic research foundation grant. We will hear from three countries in the Asian region where we provided assistance for making their Disaster Nursing curriculum as well as textbooks. Also, our faculty members have been conducting their researches on the Great East Japan Disaster by this grant aid. They will be able to give you a glimpse of the fruits of researches.

We, as the university of the Red Cross, we have been strengthening Disaster Nursing Education, but recently as so many disasters occurred and became more large scale and complexified, especially the Great East Japan Earthquake revealed, this matter. Teaching Disaster Nursing to students in international disaster nursing area and researches by faculty members will not be enough to respond the current situation when we think about disaster preparedness as well as mitigation. In order to achieve our goals in disaster preparedness and mitigation, we need to reconsider a way of living we have day to day, and also our ties and relationship with the local community. So we have realized that it is deeply seeded in our day to day lives and our relationship with the community. And it's not just a mere branch of Disaster Nursing, we have to realize that it has to encompass all other nursing fields. That is something we have learned throughout our firsthand experiences.

The direction we should be aiming for has become quite clear, but the road ahead is still very long. We have just begun. We still have to conduct more researches and accumulate the knowledge based on our researches and practice. In this regard, I am looking forward to listening to the results of Disaster Nursing Education Project and contests of panel discussion today.

I'd like to thank all of the participants from various countries and have taken parts. I'd like to thank you for your dedication to this symposium. We can also enjoy program and wish to have fruitful symposium. Thank you.

# Outline of the Disaster Nursing Education Project

Hiroshi Higashiura

Head of the Project

Good afternoon ladies and gentlemen. I have a pleasure to introduce outline of the Disaster Nursing Education project in Asian region as a head of the project. One day in January 2011, I received an email and was informed that in one week's time we would have a chance to make a proposal for a new project and if I had a good idea to make an application for that. Of course, our university has a very good historical background regarding disaster relief vis-a-vis the education of nurses. I wrote a proposal that was discussed later on in a meeting at the college. This supported program for the strategic research foundation at private universities, supported by the Ministry of Education, was to be conducted by a half share and funding between the Ministry and our college. Shortly after that, in March of the same year, occurred the Great East Japan Earthquake, this project was adopted and approved by the college and funding from the Ministry was provided.

Aim of the project is that JRCCN is expected to become the center of Disaster Nursing Education and Researches at national and international level. As of today, there are more than 200 nursing colleges and schools. As distinctive characteristic, JRCCN will serve as a center of Disaster Nursing Education Researches. There are two methods.

The 1<sup>st</sup> way is that faculty members of different fields at JRCCN develop researches related to disaster. Usually specialized researched developed in each field, however, disaster related nursing care is stated in the nursing textbook or not. I would like to address that the Great East Japan Earthquake offered us a chance to consider Disaster Nursing care in all nursing fields.

Also we need to think about other neighboring Asian countries, which are disaster prone countries very much. 60% of the disasters in the whole world occurred in Asian region. And we wanted to find out exactly what was going on with Disaster Nursing Education and researches in Asian countries. There is the Asia-Pacific zonal office of International Federation of the Red Cross and the Red Crescent Societies (IFRC) in Kuala Lumpur. We consulted with them and solicited applications. There were applications from six out of 16 countries. We have conducted interviews with candidates. We selected three countries to participate in this project. Mr. Jagan Chapagain and Mr. Jim Catampongan of IFRC Kuala Lumpur helped us. We have with us today six fellow researchers from these three countries of Bangladesh, Indonesia and Thailand. We would like to have their presentations on the process and making Disaster Nursing Textbook and teaching materials. They have engaged in research work in their own countries, too. Their researches reports including researches of JRCCN will be presented tomorrow. Also there are other researchers who have supported the project in developing textbooks. We invited them to participate in this symposium and make a presentation on current condition and issues. So we have meaningful symposium today and tomorrow. I hope you will enjoy the presentations and also participate in discussions with us. Thank you.

[See Higashiura's presentation powerpoint.p45](#)

## **Report on development of Disaster Nursing Textbook in Bangladesh, Indonesia and Thailand**

**Chairpersons:** Now, we'd like to welcome speakers from Bangladesh, Indonesia and Thailand. They are going to talk about their works. First of all, we would like to welcome Mr. Karim and Ms. Sonali.

**Sonali:** Good morning everybody, and Konnichiwa. My presentation, first I showed the video. Next, I want to speak about the development of a Disaster Nursing textbook for nurse-midwives education. There are many disasters in the world, both man-made and natural. But Bangladesh is also disaster prone community, man-made and also natural disaster. Recent man-made disaster is shown in the video, the Rana Plaza tragedy. It is a real picture of that event. It was a very painful and pathetic event in Bangladesh. In that event, the junior midwives or nurse midwives were deployed to the disaster site. They could attend in that event for the first time. In our country, they can do many types of Disaster Nursing in that field.

The world is very much vulnerable due to disaster and prone for disaster. South Asia is high response country in the world. Bangladesh is also very much prone to natural and man-made disasters. The common disaster related factors are geographic setting, demographic pressure, environmental degradation, poverty and political reasons. Bangladesh Red Crescent Society has been playing a crucial role through its different organizations. BDRCS-Nurse Midwives have no knowledge on Disaster Nursing, even though in Bangladesh Nursing Council, they have no disaster curriculum, syllabus or textbooks. But from the perspective as an auxiliary from the government, BDRCS decided to produce some textbooks, curriculum and syllabus for the BDRCS nursing students with the great help of the Japanese Red Cross College of Nursing through the fellowship program. That is a great opportunity for our country. We participated in the program in the program in Japan, and visited disaster affected areas in Japan for the first time, such as Kesen-numa, Iwaki, Kobe and Tokyo We could find several types of events in that area and we are enjoying some real sessions, how to manage the disaster situations.

Then the objectives of this program; development of curriculum, syllabus and textbooks, 1.development of teaching materials, and conduct two own research. The objectives of the textbook are: enhance knowledge and skills of nurse-midwives in disaster preparedness activities; 2. acquire knowledge, skills and attitude of nurse-midwives in disaster response activities; 3. understand the roles of nurse-midwives during disaster and emergency; and 4. be able to be familiar with disaster recovery activities. This can be certain according to ICN framework.

Then we came back to Bangladesh from Japan first time, then we could share our knowledge with several types of NGOs, the Bangladesh Nursing Council, BDRCS health personnel, Bangladesh Nursing institutions, UNICEF and WHO representatives. Then I can give sharing with them and take suggestions about how to develop our textbook.

Then we could organize our first workshop. According to the suggestions, we could organize the first workshop in May 2012.

The total participants were 36, from JRCCN and different government nursing colleges, Bangladesh Red Crescent Society, and different nursing institutes. After we finished our workshop, 90% of the participants answered were satisfied with the event. They strongly demanded to develop the Disaster Nursing textbook. More than the request, they were very

interested in working in those areas.

Then we have joined the model lecture in TRCCN, the Thailand Red Cross College of Nursing, they organized a model lecture on Disaster Nursing Education. So we could observe their plan and a lot of things in Thailand. In model lecture, they implemented various types of simulation practices about triage, psychological support.

We also visited Khulna area, the disaster affected area in Bangladesh with the Master's students of the Japanese Red Cross College of Nursing and Professor. Ohara. Then I invite my colleague, Karim-san to present the rest of it. Thank you.

**Karim:** Konnichiwa. Actually we showed three or four slides about how we incorporate our textbook in Bangladesh. First our experience sharing workshop and national workshop and some communication with BRAC university and communicate with government people at various levels. And then after, we include our issues to the honorable chairman and member of the parliament, our Professor Muhammad Serajul Akbar. His initiative, he will advance a national workshop, participation from NGOs, WHO, UNICEF and various levels. From that workshop, he will form a working group. This working group will work with us very closely what he learned from Sonali within our experience from the medical relief operation, from our country emergency situation, observe in Thailand experience and to see in various Japanese experience and to review literature in our country office we have collected some documents to develop a textbook for our midwifery and nursing students.

This book will be piloted in our nursing institute, Holly Family Medical College Nursing Institute. And after piloting, we promote seven chapters. In these seven chapters, our honorable chairman gave seven working groups for review. Because of that, Bangladesh, at first, had no syllabus, curriculum and textbook for our midwives and nurses. For that, we incorporated this curriculum and sent this curriculum to our editor. Our editor is, the chief editor in Bangladesh is in charge of ICCDRV publication. But unfortunately, we are sorry, because of that, due to political unrest in Bangladesh, he is not finished his editing.

We see how we enrich our textbook. Sometimes, from Japan, post-graduate students and master's students visited in our very remote areas in Bangladesh and several times with Ohara-sensei, some Tsukada and Kawate-sensei also visited in remote areas of Bangladesh and they studied with their students. This study result will come out in our textbook because we think that many events they will find out from the rural areas because Bangladesh is a recurrent natural disaster prone country in the world. Every year, disaster hits it. After liberation, 200 times disaster hit our country.

Our textbook consists of seven chapters. The first chapter is introduction. The second chapter is mitigation and prevention. The fifth chapter is preparedness competencies. The sixth chapter is response competencies and the seventh chapter is recovery competencies. And recovery competencies includes food and nutrition, disaster related diseases, prevention, and rehabilitation. Next. And it is our page, our cover page of our textbook.

Next. We conducted two kinds of research, side by side. This is the first time we have conducted another two separate studies. Recently, in Bangladesh, two events happened, one in Brahmanbaria Tornado, one in Rana Plaza tragedy. In this tragedy, 210 garment workers died at the time and we had for the first time Bangladesh Red Crescent Society nurses participated there and with two fellows, simple study in this Rana Plaza study. And then, this is the study report. We have completed two researches at that time. Next.

In Bangladesh, political unrest is ongoing, last three months ongoing. For that reason, next some work will not be completed because, while we want to go, we have a need to translate it in Bangla, our textbook is already completed in English version, but Bangla in February. Training of trainers in March 2014. Trainers will introduce in their own institutions in April 2014. Monitoring by fellows in 2014. It is important, too, that this curriculum, syllabus and textbook need to merge with our national curriculum. Next. We are sorry to say that, because Bangladesh is belated, so our honorable chairman, a poor time for elected board members present here. For that reason, we hope that we are top work. The last three years, we have drafted curriculum, syllabus and textbook, and we hope our honorable government board member chair, public MP, parliament member will take initiative to incorporate this textbook with the government curriculum and syllabus.

Finally, remarks of the fellows; second, we think that in our country, it is a recurrently natural disaster prone country. Every year it happens in the rural areas and the coastal regions of Bangladesh. We think this textbook needs to develop several types of modules – modules for the teachers, modules for the students, modules for the volunteers – because too many volunteers working in the coastal regions. So if you develop volunteers, it will be helpful for the disaster prevention in the coastal regions of Bangladesh.

Limitation of time; how we want to say, we two fellows, conducting this fellowship program two years in Japan, but our honorable chairman is the top-most chair in Bangladesh, but we request because no time. Only night time we work at our office, but daytime, fulltime is official work. So if some, give some time, we will develop good fruits. It is good news for Bangladesh that, we are carrying good news from Bangladesh. What is good news? Good news is that the first time Bangladesh developed a textbook, curriculum and syllabus for nursing students. And output of the project that sometimes it is possible to go in the affected area for nurses. And it is possible to teach Disaster Nursing institute. And possible to make cooperation and collaboration with other organizations and resource persons and enjoy disaster area. Thank you for patient hearing. Please, any questions because very short time we open the floor for any questions to ask.

[See Bangladesh's presentation powerpoint.p46](#)

**Chairperson:** Mr. Karim and Ms. Sonali, thank you very much. Sorry, any questions from the floor to the presentation by the representatives of Bangladesh. Please raise your hand.

**Karim:** Any questions or comments on behalf of our textbook, curriculum, syllabus and textbook from Bangladesh?

**Sonali :** Also please give me any comments or suggestions. We can take these.

**Chairperson:** Any other comments or questions, please. Yes, please.

**Prof. Ohara:** Let me ask you a question. Before you two participated in this project in Bangladesh, midwives and nurses were not dispatched to the disaster hit areas as far as I understand. But when the sewing plant collapsed, due to the effect of this project, the Bangladesh Red Cross Society was able to bring nurses and midwives to the disaster hit area for the first time. And they took care of the mental stress of those affected people. So would you

please explain the impression of the nurses experienced disaster nursing there?

**Karim:** Actually, who will participate in disaster prone area? Who has experience? In Bangladesh, personally, we both have participated 12 times in disaster responses but we observed that no midwife, nursing tasks. Because of that, in our curriculum, syllabus and textbook, no input to teach Disaster Nursing. Some social problems here. It was the first time when we completed fellowship program of disaster nursing. We arranged experience sharing workshop like first workshop and second workshop in our country. Then our midwives became interested in participating. When the Rana Plaza collapsed, when water logging in the southern part of Bangladesh, we called our midwives and nurses and asked if they wanted to come with us. They were very interested in participating. And in Rana Plaza, we were astonished. With only three hours short notice, but some nurses participated. There are 56 MCH centers in Bangladesh, 27 are in the remote area. So 15 midwives came within three hours from Dhaka area and Tangail area. So we participated in the Rana Plaza tragedy and they stayed with us. And we are actually very hypnotized how they came and worked with us without any changes of their dresses. So the midwives worked like that. I was happy that Bangladesh could do. If they can include our textbook, curriculum and syllabus and the good lessons from our classroom and the motivation will be increased. We hope. Thank you.

**Chairperson:** Thank you very much, Mr. Karim and Ms. Sonali. Next, I would like to call on our colleagues from Indonesia, Mr. Habib Priyono and Mr. Mahfud.

**Indonesia (Mahfud):** Thank you. Good afternoon everybody, and Konnichiwa. This activities report Disaster Nursing project January 2012 until January 2014. The main activities were to develop Disaster Nursing textbook, and after that, to conduct research, and then teachers' training about how to teach Disaster Nursing.

How to develop Disaster Nursing textbook, first of all information was gathered from nursing teachers, nurses and students. And then, identification of disaster nursing and necessity of disaster nursing was discussed by group works. And after that, draft of textbook was made through the work of editorial meeting.

The first workshop on developing Disaster Nursing textbook was 21-23 October, 2012. We had lectures from Indonesia Red Cross Society, Director of Nursing, Ministry of Health, Indonesian Emergency Nurses Association, School of Nursing, University of Indonesia, Gadjah Mada University. And the participants were nursing teachers of 18 schools, seven nurses and two midwives of clinical field. The objectives of the workshop were: first, to list up related knowledge on Disaster Nursing; second, to share knowledge, skills and experiences on Disaster Nursing; and third, to develop draft content textbooks on Disaster Nursing.

The topics of group work on the first workshop were: 1. Foundation disaster and disaster management; 2. Disaster Nursing (content includes triage, the importance of medical medicine and nursing care in acute phase, physical assessment); 3. Disaster Nursing on vulnerability groups; 4. Psychological impact of disaster and mental health; 5. Nursing disaster in chronic phases; and 6. Nursing disaster in recovery phases.

**Habib:** Results and evaluation: A. Draft of textbook topics consists of seven chapters. Chapter 1 – history and present situation of disaster; Chapter 2 – fundamental knowledge on Disaster Nursing; Chapter 3 – nursing activities in acute phase; Chapter 4 – nursing activities in recovery

phase; Chapter 5 – Disaster Nursing activities in silent phase; Chapter 6 – vulnerable groups in disaster; and Chapter 7 – heart caring for the victim and relief care provides. B. Forming the editorial committee members, consisting of six teachers who have experience to teach Disaster Nursing. C. Decided the one chief editor, Elsi Dwi Hapsari, Chief Dep. of Maternity Nursing Director, Master Nursing Program from Gadjah Mada University.

And Evaluation: The results of questionnaire from participants who attended the workshop were: 1. Workshop was useful (80%); 2. Increasing of knowledge and skill on Disaster Nursing (43%); and 3. Necessary to develop Disaster Nursing textbooks.

These are photos of the first workshop. Next, we want to say that during this project, we visited the Thai Red Cross College of Nursing on December 22 and 23, 2012 for the trial model lecture. Through this occasion in Thailand, we got learning more about Disaster Nursing, especially in the aspects of how to teach students about disasters. We could learn new methods of teaching drills such as the use of audio-visual media and how to communicate effectively at the disaster site. During the stay in Japan, we also got more knowledge about Disaster Nursing activities and the disaster cycle. During 3-year project, in Japan we learned more from disaster site through visits of temporary housing at Kesen-numa City, Nihonmatsu City, Iwaki City and others.

This is how to make a textbook. We conducted discussions with committee editorial members. In October 2012, we selected the authors from the first workshop. And then in November 2012, we asked the authors to make draft content of the textbook. And then in November 2012, the first draft of the textbook was made and then in January 2013, we had the first editorial meeting. The second editorial meeting was conducted in March 2013 and the third editorial meeting was conducted in August 2013 and the last editorial meeting in September 2013. The objectives of the editorial committee meetings: the first is editing draft of textbook based on the suggestions from the Japanese Red Cross College of Nursing, and the second was developing the draft textbook. Outcomes: Index of draft textbook and content of draft textbook in Indonesian version. This is photo of editorial meeting.

The second workshop was conducted in July 2013: Teacher Training – How to teach Disaster Nursing in nursing school. The teachers who provided the lectures came from the Japanese Red Cross College of Nursing, the Indonesia Red Cross Society, the Bogor School of Nursing, the Gadjah Mada University Jogjakarta, and Sarjito Hospital Jogjakarta. The participants that attended the second workshop totalled 56. Participants came from nursing schools and midwives from West Java Province, Central Java Province, Sumatra Province, Borneo Province, Sulawesi Province, and Jogjakarta Province.

This is the content of teachers training that was conducted in the second workshop. Number one is fundamental knowledge on Disaster Nursing; 2. How to teach disasters to students; 3. How to build the curricula of Disaster Nursing; 4. Psychological impact of disaster and mental health; 5. Disaster Nursing emergency in Puskesmas or hospital management; and 6. Disaster Nursing aspects related to disaster cycle experience from Japan. Besides the lectures, we provided drills, such as active listening in disaster sites and triage in disaster sites.

Results and evaluation from the second workshop teacher's trainings are: methods of evaluation we used – self reflection to all participants, pre-test and post-tests using questionnaires comprised of 40 questions regarding kind disaster, disaster cycle, Disaster Nursing competencies, disease related to the disaster, disaster stress, community health, and triage. Results from the questionnaire: self-reflection – 33 participants were hoping that after joining this teachers training, they could actively contribute to the community. The second is increasing



of knowledge and skill on teaching Disaster Nursing. (73% of participants) And suggestions from participants were that we need more topics on simulation on Disaster Nursing, not only drill of triage in disaster, but also psychological communication in disaster. This is a photo of the second workshop.

After the second workshop, we developed a textbook on Disaster Nursing. List of contents has the textbook divided into seven chapters: 1. Fundamentals on disaster; 2. Disaster management; 3. Nursing activities on acute phase; 4. Nursing activities in recovery phase; 5. Nursing activities in pre-incident phase (mitigation, prevention and preparedness); 6. Nursing activities on vulnerable groups. We divided into: pregnant women, pediatric, people with chronic illness, elderly, and disabled; and the last chapter is mental health on disaster. This is the cover of our Disaster Nursing textbook in first version.

Our next planning, besides developing textbooks, we also conduct research. Research number one – experience and knowledge of Disaster Nursing among nursing students. And research number two, experience and challenges in teaching Disaster Nursing, collaborate with Dr. Elsi Hapsari from Gadjra Mada University and Professor Mariko Ohara from the Japanese Red Cross College of nursing.

Our next planning is to ask for suggestions and advice from Indonesian National Nurses Organization. We plan to conduct a workshop on utilizing textbook on Disaster Nursing and then send the textbook to some nursing schools in Indonesia. And the last is textbook translation into English.

On this occasion, we express our sincere thanks and appreciation to the Japanese Red Cross College of Nursing for three year grant from their supportive program for the strategy grant for nurses at private universities of Ministry of Education, Culture, Sport, Science and Technology in Japan. And also to the Indonesian Red Cross Society. Thank you very much.

[See Indonesia's presentation powerpoint.p50](#)

**Chairperson:** So, thank you very much. If you have any question to Mr. Mahfud as well as Mr. Habib, please. Yes, please.

**A participant from the floor:** I have one question. Who are the people who are writing the textbook and how did you find them and select them? I think those authors of the textbook are crucial, so can you please tell us how you have decided them?

**Habib:** Thank you for the question. We selected some authors when we conducted the first workshop in October 2012. We invited participants from 18 school of nursing that came from Java, Aceh, Sumatra, Jogjakarta, and then we selected by the curriculum vitae that participants submitted. We selected the teachers who have experienced teaching of Disaster Nursing at their nursing schools.

**A participant from the floor:** Thank you very much for that. I understand very well.

**Chairperson:** Are there any other questions?

**A participant from the floor:** Thank you for your nice presentation. One question to you; is there disaster nursing in the curriculum? If there is no curriculum, how do they get the

experience of disaster nursing. This is very important. And did you undertake any research or any onsite experience with managing disaster in your region? Thank you.

**Habib:** Thank you for your question. For our country, we didn't develop the curricula of disaster nursing because our national Red Cross Society, we have no school of nursing. So we have just developed textbook on Disaster Nursing. We hope that the textbook can be used as one of the parts of teaching of disaster nursing in Indonesia.

**A participant from the floor:** I think that is why I asked you the question, because you said when you had selected the editorial board or the persons who are involved in writing the book, you have selected somebody from the participants of the first meeting of their workshop (Yes.). As you said, there is no formal curriculum; then it is very difficult to have a curriculum without much experience. So my suggestion, I think, if you had asked anybody who is working in disaster nursing in your area, in Indonesia, who may not be a nurse, but of another profession, they can probably help you to make the standard book better because the book is very important. And the more important thing is the content because you have to incorporate into the existing textbook of nursing. So if it is a very big, volume, most probably you would have a lot of trouble in introducing the subject to the curriculum committee of the nursing education. So this is the dilemma faced by everybody when they introduce a new curriculum. How do you want that problem can be solved by you?

**Mahfud:** Thank you very much. I think I want to try to answer the very important question. In Indonesia, we have several kinds of nursing education, including nursing diploma 3-year and 4-year programs and also 4-year undergraduate program. So far, as Mr. Habib explained in the presentation, we did focus group discussions. We invited several lecturers and asked their experience, how they teach Disaster Nursing. And I think he will present tomorrow. And one of the important results of the focus group discussion is that in some institutions, they put the topic of Disaster Nursing as a local subject. And another institution only invites students to have emergency activities in disaster areas and not structured, not in a good structure. So also they suggested us how we can make a textbook. So I think this is a very important step with making this textbook and, as mentioned, after the presentation in here, when we return back to Indonesia, we will have another important meeting with the Indonesian Nurses Association. We would like to ask for their comments and advice so that the book can be used in what level and in what grade can be more useful in the future. Thank you very much.

**Chairperson:** Are there any others? Ms. Sonali?

**Sonali:** I have a question to my friends. You can develop the new topics you incorporate with your existing curriculum. How can you implement these new topics on existing curriculum? These topics can be included in the existing curriculum, so you need time. How can you introduce in the existing curriculum because there is a limitation of time because the class hours are limited? So how can you include these types of topics in your existing national curriculum? Please can you describe or you can say.

**Mahfud:** Thank you for your question, Sonali-san. After our textbook is completed, we will ask the Indonesian Nursing Association and also the Ministry of Health. The Ministry of Health has nursing schools around Indonesia, so I can propose our textbook to use as a part of other textbooks that our government now prepares to develop Disaster Nursing textbook.

**Chairperson:** Well, thank you very much, everyone. Mr. Habib and Mr. Mahfud, thank you for your presentation. Thank you very much. We'd like to now invite Ms. Somjinda and Ms.

Wanpen from Thailand to make their presentation.

**Thailand (Somjinda & Wanpen):** Konnichiwa. Good afternoon everybody. Today is a good opportunity for both of us to have a chance to share and to present our activities during the past two years of the Disaster Nursing Education projects. Our main activities during the past two years, we have three activities. The first one was to improve Disaster Nursing syllabus and textbook. The second was to develop supportive teaching materials and the third was to do the research.

For the first activities, improving Disaster Nursing syllabus and textbook; we went step by step like this. In the first step we did information gathering. We did this in four categories. First, we studied the competencies of Disaster Nursing from the ICN framework and also from TNC of Thailand. But now we don't have Disaster Nursing competency, so we followed the ICN. In the second, we studied the higher education framework of Thailand, the curriculum. First one, we studied from the Thailand Qualification Framework and the second one TNC and from Chulalongkorn University, because our college is affiliated with Chulalongkorn University, so we needed to know the standards of the Bachelor's side. Also we studied ourselves, Thai Red Cross College of Nursing. The third, we gathered knowledge and suggestions from experts. We organized workshops and we invited specialists, 30 participants from throughout the country; 15 from the faculty of nursing. The teachers who came to join this workshop, they are related to Disaster Nursing. Some teach Disaster Nursing, but some are not directly related to Disaster Nursing, but like emergency nursing or other nursing. And 15 nurses from the hospital that used to be affected by the disaster. And also we learned a lot from JRCCN and visited the affected areas in Japan. And also we did literature review. These are some of the pictures that we learned and enhanced our knowledge from JRCCN and other organizations in Japan. This is some supportive teaching material that we learned from JRCCN. And these, we visited the Japanese Red Cross in Tokyo and also simulation center and also medical center, Japanese medical center. And also, we visited the affected area in Kesen-numa and we learned a lot from that area.

These are some pictures from the first workshop that we organized in Bangkok. At that time, it was good luck for us that we had Professor Morita, Dean of JRCCN, and also the experts in Disaster Nursing, Professor Ohara and Kawate-san and Tsukada-san, with us at that time.

From the first step, we got the data and information, so we drafted the syllabus and textbook. At that time, our syllabus was from the suggestions of the participants, maybe from the second or third year nursing students. But it should be a compulsory subject and, at least, it should be three credits. That means two theory and one drill. And for the textbook at that time, we will have nine chapters, covering 4 domains and 10 competencies, according to ICN framework.

After we got the syllabus and textbook, we did trial the syllabus and some of the textbook. We did trial with 70 second year nursing students at my college. Four chapters of the textbook were in the trial. These four chapters covered three phases of disaster. From that workshop, we got the students' suggestions like this. They said contents of the textbook is appropriate. It means it was clear and easy to understand. Average satisfaction score for teaching method at that time was 4.78.

And these are some pictures from the trial syllabus. At that time it was good luck for us again because we had the experts from JRCCN, Professor Hiroshi, Professor Ohara and Kawate-san and also our friends from Indonesia and Bangladesh. So not only the students' suggestions, but also their advice and their suggestions were very, very useful for us. These are the activities during the trial syllabus.

After that, we went to the next step. We gathered all of the data and information and went back to JRCCN again. And we talked with the experts. We discussed and also, at this time, we had a chance to visit the affected area in Japan again. So we learned more and more. Finally, we finalized our syllabus and textbook like this. The syllabus will be for the third year nursing students and is a compulsory subject for 3 credits, 2 for theory and 1 for drill. Our textbook, finally, consists of 12 chapters, covering 4 domains and 10 competencies, according to ICN framework. Okay, this, now we printed already in both Thai version and English version. You can see more in detail at the table near the door.

In our textbook, 12 chapters; the first one is overview of disaster and disaster management; the second is overview of Disaster Nursing; the third is communication and coordination in disaster management; the fourth is nursing care for prevention, mitigation and preparedness; the fifth is disaster triage; the sixth is first aid; the seventh is casualty handling and referral; the eighth is nursing care for recovery; and the ninth is psychological care in Disaster Nursing; 10 is nursing care for vulnerable group in disaster; 11 is organizations involved in disaster management; and the last chapter is ethical, education and research in Disaster Nursing.

Before we printed this textbook, four experts cooperated with us for editing. They were two nurses and two faculty members. One of them is Mr. Pensili Mekhola, Deputy Director of First Aid and Health Care Training Center of the TRCS. The other is Mr. Pavinee Yuprasert who is the Head of Relief Division, Relief and Community Health Bureau, TRCS. Both of them got Florence Nightingale Medal award already. The third and the fourth editors were from Faculty of Nursing Prof. Wallapa Soonthornnut of Vongchawalitkul University is an expert of Disaster Nursing. She used to be my teacher. Another editor was Prof. Achana Pumdung of TRCCN.

And also we are continuing the second activity. The second activity is to develop supportive teaching materials. In this activity, we also did it step by step as follows. For the first step, we discussed together with our colleagues and decided to do supportive teaching materials in five topics. Preparedness; triage; psychological first aid; first aid; and the last is casualty handling.

In the second step, we developed supportive teaching materials. In 2012, we developed three materials: first magnetic models such as maps, personnel, building, equipment, vehicles, etc., for preparedness and first aid; the second is interactive games for triage; third is interactive games or interactive teaching for communication in psychological first aid.

In 2013, we developed bone fractures for first aid and casualty handling. These are some models such as for people, nurses, and doctors. And for the people, we put signs and symptoms and students assess and put the triage tag or put the first aid tag on them. And these are some equipment models and signs and symptoms and first aid. And open fracture you see here.

And the third step, we did trial lecture on December 22 and 23, 2012 using supportive materials, which were developed in 2012, including with trial syllabus and textbook. And we got evaluation and suggestions from the students. They said it was very interesting, made more understanding of content, the students need more kinds or types of materials, and the average score for material appropriation was 4.85. We showed some equipment or models such as magnetic maps or magnetic dolls at the table. This is for the interactive games for the earthquake, fire and flooding. This was for interactive games. And this was for preparedness.

And then the fourth step, we finalized the supportive teaching materials. These are magnetic models for preparedness and first aid, interactive games for triage, interactive games or teaching for communication in psychological first aid, and the last is bone fractures for first aid and

casualty handling.

And the last activity we did two researches. The first was the health impact and adaptation of the elderly affected by flood in Ladkrabang District, Bangkok. And the second was the effect on interactive teaching method on achievement and prevention – mitigation, preparedness and response competencies of undergraduate nursing students based on International Council of Nurses (ICN) framework of Disaster Nursing competencies.

And the activities are nearly finished, but we keep going on activities the way to disseminate the textbook to colleges or faculties of nursing, hospitals, especially in disaster affected areas, for Thailand Nurses Association and Thailand Nursing and Midwifery Council. We need to strengthen Disaster Nursing networks in Thailand and raise awareness among colleges and faculties of nursing to add Disaster Nursing to their curriculum.

On all this, we presented our activities during this project, and outcomes which we developed. Besides the outcomes, this project provided us to enhance our knowledge and profound the understanding of Disaster Nursing and also expand networking in Disaster Nursing.

Finally, we would like to say thanks to JRCCN for letting us join this project and for initiating this project, advice, support, encouragement and funding. And also we say thanks to TRCN and our colleagues for support and sharing their ideas. And finally, for our families for their continuous assistance, encouragement and support. Arigatou gozaimasu. Kob khun ka.

[See Thai's presentation powerpoint.p53](#)

**Chairperson:** Thank you very much Ms.Somjinda and Ms. Wanpen. Now we would like to take some questions, if you have, on the presentation made by the representatives from Thailand.

**Catampongan:** I am Jim Catampongan. I am from the IFRC in the Asia-Pacific zone office. First of all, thank you to the fellows for presenting their activities and the work that they have done in the last two years. The hard work, dedication is very obvious in the presentations. And also contribution to Disaster Nursing Education in your country, which I feel also can be considered breakthroughs. This has been made possible because of the strong support and contribution, the initiative of the Japanese Red Cross College of Nursing. So thank you very much and you are really acknowledged.

I have a comment and, perhaps, a question to the fellows, not necessarily from Thailand or Bangladesh or Indonesia. Anybody can answer this. In terms of the comment, I really appreciate that you are looking at the different phases; you are looking at the disaster management cycle, because the role of nurses in disaster is not only to be mobilized and deployed in clinics and hospitals. There are more people outside in the community that also need assistance. There are many uninjured people who are not sick that also need attention so they will not get sick. And Disaster Nursing work is not only during the response. It is a long process. We need to accompany people in rehabilitation, reconstruction and then also becoming stronger so that in future disasters, they may not need our assistance. They will be able to take care of their needs in relation to health. Some of the presentations, you have obviously considered the ICN competencies, which I think the WHO is also an active part in endorsing. The question I have is in relation to the syllabus and the textbooks that you are preparing. Considering that we are talking about three countries, during the process of developing, have you had some sort of discussions, analysis as to what the similarities are? What the differences are in the syllabus and

contents, including the way these trainings or education modules, for example, are being delivered to student nurses. And if there are commonalities or differences, what probably are the reasons why these are different or these are common? Thank you. Or can I request somebody to answer? Can we ask the fellows to respond to that?

**Chairperson:** First from Thailand.

**Thailand (Wanpen):** About the relationship between syllabus and textbook? Do you mean we talk together among our three countries about the contents in the textbook? It should cover all phases of disaster. Yes.

**Bangladesh (Sonali):** Actually, we discussed that about among three different countries. In our country, there is no textbook, curriculum nor syllabus on disaster. So we could develop from the beginning. We, all three countries, we followed the ICN framework. This is the commonality. The other countries, Thailand and Indonesia, they could develop the existing curriculum. They could add something into their textbooks, but in Bangladesh, our textbook is totally new. Thank you.

**Bangladesh (Akbar):** Can I put one suggestion? Because the authors of these textbooks, they have already discussed the various issues of content of the textbook. If I suggest that some of the experts of that particular country, of the three countries, if they and along with the persons who were involved in writing can have a one-day workshop, then most probably they can have a better outcome because they can discuss themselves and they can take out the things which they feel are not needed. Or they can adopt some other new content. So I think this may be, so I can request this to the Japan Red Cross College of Nursing. Is it possible to take that sort of proposal? Thank you.

**Chairperson:** Ohara-sensei, I think you should respond to the question or proposal raised.

**Ohara:** Thank you very much for your presentations from the three countries. I have been involved in this project for the last three years, so let me say some comments including the suggestion raised. First of all, if I remember correctly, when you came to Japan and made an action plan together in the first year, your image of Disaster Nursing was related to Disaster Management in the hospital. But we emphasized the importance of attention more people who centered care and observe livelihood of the victim based on disaster medicine. For example, in Bangladesh, junior midwives are closer to survivors. They are more involved with people in the communities than hospital staff. So we recommended that the textbook should be met their needs. In Indonesia, in the community, there are public health centers, called PUSKEMAS, the public nurses' activities. There are more important, so we should take their Disaster Nursing activities into consideration. The case of Thailand, you had been involved in Disaster Nursing, but you were focusing on the hospital activities. My understanding was that you first tried to change that concept and made improvements in the system. Of course, you have accepted our advice and developed the textbook as you presented today.

And I am very happy about the progress you developed. You accepted our advice from our experience, and completed the textbooks and researches. In a country, I found more doctors than nurses took parts in writing the textbook. I would like to see more nurses in your countries involved in the writing of the textbooks in the next version.

**Higashiura:** I am Higashiura. I would like to make additional comments to what Professor. Ohara said. I think each country, the education on Disaster Nursing was taking place, but you

were relying on the knowledge imported from abroad. Moreover, you did not use your own data, but other countries' data in some cases. We never thought that we would write textbooks for you, but rather, we wanted to see textbooks, written by your own people, based upon your knowledge, on your own cultures and experiences in the disaster responses. Our role was to provide assistance to you along your progress. We didn't only provide you with different suggestions but also invite you to Japan; you could see the actual affected areas and talked to the people who experienced the disasters, as you saw in earlier slides. We have teaching materials in the back of the room. Though this process you developed your own textbooks and syllabuses in.

I believe it was on a Saturday, 70 nursing students were gathered together and they took new education on Disaster Nursing. The students said that the teaching method was completely different from what you had been doing. There were interactive games; not only lectures, but more activities. Contemporary activities suit the students, and they asked to introduce these methods in the lessons. As it was reported, Bangladesh and Indonesian fellows were invited to participate in the program presented by Thailand, for they could have an opportunity to see what Thailand was doing. We believed that anything of what was being done in Thailand could be adopted in your countries. The both countries seemed to learn a great deal. We have also learned from this interaction. This interactive learning was a great opportunity to all of three countries. It was a very important learning opportunity each other.

The chairman of the Red Crescent in Bangladesh asked us if this kind of activities can be continued or not, Mr. Akbar. This project will be finished for 3 years, so not easy to continue, however, I think it is very important for us to maintain this relationship. It's not just a question of money, but it's a question of further creative collaboration amongst us all. I would like to see continuation of our collaborative work sharing experience.

**Chairperson:** Thank you very much. We would like to thank Ms. Somjinda and Ms. Wanpen for their presentations. We conclude the presentation session. Ladies and gentlemen, we would like to have a 15-minute break. Then we would like to hold symposium.

## Symposium

**MC:** Ladies and gentlemen, we would like to hold the symposium. The symposium will be chaired by Mr. Jim Catampongan. Please.

**Chairperson (Mr. Jim Catampongan):** Good afternoon ladies and gentlemen. Good afternoon fellow nurses. As mentioned, my name is Jim Catampongan, I'm the emergency health coordinator of the International Federation of Red Cross and Red Crescent Societies, Asia Pacific Zone Office, in Kuala Lumpur. It's a privilege to be invited to be part of this symposium on Disaster Nursing Education, and to have witnessed the reports and presentations of our fellows from three countries, and, which has been made possible because of the initiative of the Japanese Red Cross College of Nursing. It's a great honor to be chairing this symposium. Considering that it's a relevant subject - Disaster Nursing and Disaster Nursing Education.

As we speak, there are many emergencies and disasters occurring in different countries of the Asia Pacific and globally. We know that the nurses are also mobilized to respond to disasters, they save lives, while some of them are also affected members of the population. So this is a really relevant agenda and subject matter that we are talking about. As mentioned by Professor. Higashura and Professor. Takada, the occurrence of disasters are increasing. They are also becoming more virulent. The number of population affected is also increasing.

If we talk about the Asia Pacific region, we have the most number of disasters. As mentioned earlier, 60% of the disasters and emergencies occurring globally are happening in Asia Pacific. We are particularly suffering mostly from floods, due to monsoon rains, or typhoons. While there is good news that the number of people who are killed, is decreasing, the number of people affected by disasters are on the other hand increasing, particularly in disasters that hit urban areas, wherein population density is really very high. In 2011, there were fewer people affected, because there were also lesser, fewer emergencies or disasters, but as the years move, pass by, there are more events that are affecting big populations.

Developing countries suffer most of the negative impacts of disasters. Considering the big proportions of poor populations in these countries, a bigger percentage of the population also usually require more assistance, as their vulnerability is also higher compared to other countries.

Nurses play a key role in responding to emergencies and disasters. Nurses are the most number among health workers, compared to doctors, midwives or other health fields. We have diverse expertise, and not only clinical but working in communities, because most of the time, we are the ones leading public health work in communities. Of course we work with other health disciplines, but doctors, considering the numbers are fewer, they tend to be in urban areas with bigger populations.

Nurses reach out to communities where access to services is sometimes an issue. Considering that we are in communities, and communities are usually the ones, severely affected by emergencies, we have the potential to be the first responders, and be a part of the teams which really save lives.

Disaster Nursing is an evolving field. Considering that Disaster Nursing Education is still some way to go, nurses are not properly trained, or insufficiently trained. That's why when nurses are deployed, they feel that they are not ready to be involved in this complex and challenging arena of disaster response.



The earlier presentation, share a number of competency frameworks. I will not elaborate on them, though they cover the four phases of the disaster management continuum, elaborated by a number of domains and areas under each phase. While there are still many things to be done to strengthen Disaster Nursing Education. There are some experiences and learning, which have been achieved in the recent past. It is a privilege to introduce the people who will be sharing their insights, their experiences in the conduct of research this afternoon.

To bring us deeper in the discussion around the situation and challenges in the context of Disaster Nursing Education, there will be five presentations which will be delivered to us by distinguished speakers from the Japanese Red Cross College of Nursing, as well as our colleagues from other countries.

[See Catampongan's presentation powerpoint.p59](#)

We will start with a report on a survey of Disaster Nursing Education in Asia, which will be done by Professor Ikumi Sasaki. This will be followed by insights on the status and challenges as well as initiatives to advance Disaster Nursing Education from Bangladesh, which will be done by a professor Doctor Mohammad Serajul Akbar, the chairperson of Bangladesh Red Crescent Society; from Indonesia, assistant professor Elsi Dwi Hapsari from the Gadjah University; from Thailand, assistant professor Doctor Varunyupa Roykulcharoen, from the Thai Red Cross College of Nursing; and from Japan, Professor Mariko Ohara. Before we give them the floor, allow me to introduce them briefly.

We'll start with the survey of Disaster Nursing Education in Asia, which will be done by Professor Sasaki. She is a professor in nursing education, specializing in nursing evaluation and nursing education system. She completed her Bachelor, Master and Doctoral degrees in the Japanese Red Cross College of Nursing. She joined as a staff in 2000, and has been engaged last year in the research related to Disaster Nursing Education.

Professor Akbar is the chairperson of the Bangladesh Red Crescent Society since 1996. He introduced the Bangladesh Red Crescent Society's 5-year plan for 2011 to 2015, which focuses on increasing the capacity of timely and quality emergency response, enhancement of the countrywide volunteer networking, decentralizing operations to be more relevant to the communities, to name a few. He's a pediatric doctor and has dedicated his medical services at major medical institutions in Bangladesh, such as the Institute of Child Health as Academic Director. He is also a member of the parliament until now; he has been the chairman of the parliamentary standing committee, a member of the Ministry of Women's and Children's Affairs of the National Assembly of Bangladesh. He has also undertaken a number of researches, and has published this research on pediatric through domestic and international journals.

Professor Hapsari is a nurse from Indonesia, who has been working in the School of Nursing, faculty of medicine, University of Gadjah Mada. Her specialty is in maternity nursing, with research interest in the area of women's health in disasters as well as nurse migration. She completed her Bachelor of Nursing degree at the University of Indonesia, between 1995 and 2000. She then went to Kobe, studied at the university graduate of health school of the health sciences where she completed her doctor of science degree. Her dissertation was entitled "The effect of the Yogyakarta earthquake on maternal and child health from the aspect of pregnancy, birth and contraception". She also published several scientific papers and became a reviewer of manuscripts in local and international journals. She holds one patent in the innovation of eating

tools for children with cerebral palsy. Since 2012, she served as the director of Master of Nursing program in Universitas Gadjah Mada.

The next presenter is from Thailand, is Dr. Varunyupa Roykulcharoen, who is the director, and assistant professor of the Thai Red Cross College of Nursing. She obtained her Bachelor of Science in nursing, first honor, gold medalist, at the Thai Red Cross College of Nursing. She completed her Masters and Doctoral degrees at the Case Western Reserve University in Cleveland, Ohio, USA. She also completed graduate certificate of nurse practitioner with primary healthcare as specialty program with the Thai Red Cross College of Nursing. She also participated in the civil service executive development program, visionary and moral leadership organized by the office of civil service commission in Thailand. She has done teaching, conducted research, and published a number of articles. She is currently a member of the committee of the Thai Nursing and Midwifery Council; the editor of the Thai Journal Nursing Council; as well as the committee of qualification assurance. She also is an Instructor of the Year 2008, at the Thai Red Cross College of Nursing.

The last, but not the least, presenter is Dr. Mariko Ohara. She is a professor of International and Disaster Nursing science at this college of nursing. She teaches Disaster Nursing Science for undergraduate as well as Masters and Doctoral courses. She is head of the Musashino community-based disaster prevention and mitigation activity network that belongs to the Disaster Nursing section of frontier center of this college, and has gained a prize 3 times by the Tokyo Fire Department. She also set up the Disaster Nursing course, Certified Nursing Specialist course in Japanese Nursing Association in collaboration with universities in 2013. She has also been engaged as a member of the board of Japan Society of Disaster Nursing and the Japanese Red Cross Society of nursing science, and worked on the spread of Disaster Nursing activity and Disaster Nursing Education activity. She has been a member of the Musashino city disaster prevention plan draft amendment examination committee since 2012. She has also been working on disaster prevention and mitigation policy, from the viewpoint of the Disaster Nursing through committee activity.

So ladies and gentlemen, those will be our presenters for this afternoon.

# Current Conditions and Issues Related to Disaster Nursing Education in Nursing Colleges in Asia

Ikumi Sasaki, Hiroshi Higashiura, Mariko Ohara, Nahoko Okamoto, Akiko Nishida

**Aim:** The first mention of training for Disaster Nursing appeared in regulations on schools for training public health nurses, midwives and nurses set out in 2009; curriculum content is not yet completely systematized. Seen from a global perspective, natural disasters occur frequently not only in Japan but in other Asian countries as well, and the need to develop curriculum content and methodology for Disaster Nursing Education has been stated before. The aim of this study is to throw light on current conditions and issues related to Disaster Nursing Education in nursing colleges in Asia.

**Method:** Survey method: self-administered paper questionnaire. In Japan, the questionnaire was sent to the presidents, department heads or faculty heads of 164 nursing colleges in existence as of January 1, 2013, together with information explaining the questionnaire's aim and requesting the cooperation of faculty staff members deemed most likely to be able to answer the questionnaire. The nursing colleges surveyed were selected from the list of ministry-approved schools for training health care professionals on the Ministry of Education, Culture, Sports, Science and Technology (MEXT)'s website. Outside Japan, questionnaires were sent to 256 nursing colleges, selected from among schools in the *International Handbook of Universities 2011* with nursing departments. Survey period: February to April 2013. Survey content: The questionnaire asked whether the schools offered Disaster Nursing Education as a course and asked about course content; educational content of Disaster Nursing; background of faculty members teaching Disaster Nursing; problems and issues in teaching Disaster Nursing; whether the school offered exchange programs related to Disaster Nursing, and so forth. Analysis method: descriptive statistics were calculated for each survey item. Ethical considerations: This survey was carried out with the approval (2012-89) of the research ethics screening committee of the Japanese Red Cross College of Nursing.

**Findings:** In total, 89 schools (56 in Japan and 33 elsewhere) replied to the survey, a retrieval rate of 21.2% (Japan 34.1%, elsewhere 12.9%). Seventy-eight schools (87.6%) offered classes concerning disaster education, and among them 34 schools (36.2%) offered a Disaster Nursing course. At many universities, Disaster Nursing Education course content covered "definition and history of disasters" and "the role of Disaster Nursing" (67 schools, 85.9%), "fundamentals of triage and triage methods" (66 schools, 84.6%), "natural disasters" (64 schools, 82.1%), and "disaster cycles" (62 schools, 79.5%). Meanwhile, fewer schools offered courses in "nursing among ethnic minorities" (14 schools, 17.9%), "Disaster Nursing theory and research (17 schools, 21.8%), "disasters and gender" (18 schools, 23.1%), and "nursing persons with intellectual disabilities" (19 schools, 24.4%). Issues affecting Disaster Nursing Education included "lack of simulation equipment," the most frequently-mentioned issue (35 schools, 40.4%), followed by "lack of teaching personnel" (35 schools, 39.3%) and "lack of personal experience with Disaster Nursing," (30 schools, 33.7%), indicating that training teaching personnel is an issue.

**Discussion:** Due to the low retrieval rate, no generalizations can be drawn from the findings, but it is clear that Disaster Nursing Education is spreading. Few schools offer courses focusing on various groups needing nursing or nursing taking into account cultural minorities or gender, the ethics of Disaster Nursing, or research into Disaster Nursing. This points to the need to think about subjects

taught for a master's course. The need for personnel to teach Disaster Nursing, and appropriate facilities, is also evident. This research is supported by a grant from the project for supporting the creation of a strategic research infrastructure at private universities (research project: Creation of a base for international Disaster Nursing research and education training).

[See Sasaki's presentation powerpoint.p61](#)

**Chairperson:** Thank you very much Professor Sasaki for sharing us a brief report of your comprehensive and detailed survey which looked into the similarities and differences of Disaster Nursing Education conducted by different countries in the region. Thanks also for sharing us some of the observations as well as challenges in Disaster Nursing Education.

In the interests of time, we will be asking the presenters to deliver their presentations. We are asking the audience to write down their questions so that as soon as all of the speakers have presented, we will have question and answer and open forum portions. Thank you.

May I know call of Professor Mohammad Serajul Akbar to make his presentation. Thank you, sir.

**Akbar:** At the outset, I thank the organizer of this conference and seminar. Particularly Japan Red Cross College of Nursing, and also thanks to all the participants, dear friends, good afternoon. I think we have already heard the situation of Asian countries as regards the Disaster Nursing situation. I think some of the countries have the very gloomy picture. And I have learned, by the presentation of my previous speaker, that she has asked two universities of Bangladesh about their situation and none of them responded. What a shame. That means there is nothing of this sort. So, I thank the Japan College of Nursing for giving the insight, in Bangladesh Red Crescent Society nursing school, so that we can take this, take up the challenge and meet the growing demand of Disaster Nursing mitigation and helping the people during their challenging situations. My presentation will be a very short one. It may not be very specific about the title, for which I do apologise, but I would like to present here our... my observations as regards the situation of disasters in Bangladesh.

As you know from the map of Bangladesh, Bangladesh is a country which is surrounded by the might ocean of Bengal. 25 of our districts are within the range of that oceanic region, and as we all know, Bangladesh is frequently visited by so many types of disaster, both natural and man-made. In the earlier presentation my colleague has presented about the disaster which occurred in Rana Plaza, which is a 6-story building which houses the garment industry with more than 11- or 12,000 people working. What is the irony of fate? Two days before that incident, the owner of that building was cautioned about the deteriorating situation of the building and requested them not to allow continuing to work in that factory. But unfortunately, what a tragedy, the owner did not listen. Even the government put a lock in the entrance, but that was broken up, and the people were forced to go for working in that situation. So this is very, very sad. Since that incident, the Bangladesh government, with pressure from various parts of the world who are buyers, like Americans, European countries, they are now motivated to follow the ethical code so that that can be implemented.

So Bangladesh is a developing country. The area of the country is 147,000 square kilometers. It is very densely populated. I think one of the highest densities of population, I think, in the world. Geography: the southern part of the country is covered by the Bay of Bengal. The

geographical location impacts of global climate change and effects of its existing weather. Every year the country is affected by natural disasters. Particularly, most of the disasters originate in the offshore areas of Bangladesh, which is surrounded by the Bay of Bengal. But one good thing, or nice thing of the nature is that during floods or during flood disasters, we get some warning. But tornado and earthquake, unfortunately we are in the belt of the area where they are prone to earthquakes. But so far, nearly 2,000 years back, we had earthquake, but now we are getting very small earthquake in Bangladesh without getting any natural disaster, but we are expecting something is coming. We do not know when or where. So we are very much cautious about the impact of a major earthquake in Bangladesh. It is the 6th most risk-prone zone for natural disasters in the world. You can imagine. And one of the problems is that it is overcrowded and also the dwelling houses are high-rising buildings and without maintaining the building code, one building, another building, so if one collapses, that can help to collapse the neighboring building. That is a probability in Bangladesh.

The Bangladesh Red Crescent Society runs the health program since its inception, and this consists of one medical college and three nursing institutions. There are BDRCS maternal and childhood centres, which are located in 56 villages, which are very much removed from the central capital, and they're in a very inaccessible region without any health facilities at all, though the Bangladesh government has the remarkable plan of having health facilities for 6,000 population, one community clinic where there should be some health personnel. So that has been started very recently. And most of the areas where these clinics are constructed are more cyclone prone, and they are managed locally as regards financial management, as regards other logistics supply. And the committee is headed by the chairman who has donated the land, and other people are also associated with this project, so they are answerable to themselves. Only the BDRCS do the follow-up and quality assessment and other, time to time we visit the places to see their performance. We are very grateful to the Japanese government for initially Japan was the first country who assisted us in establishing the first clinic of this sort, and also the blood program of the Bangladesh Red Crescent Society. So we are still remembering the contribution and the precedent of the Japan Red Cross, Mr Konoe was the first volunteer in Bangladesh during the inception of this program. Then we have got eye clinic, open clinic, the blood centers, we have eight, which captures nearly 8% of the total blood requirements of the country, which is in comparison to other activities, a tremendous help to the population, and we do follow safe blood transfusion law, which has been adopted in our country. Then the nursing training school, midwifery training institute which is .... all the hospitals who have got beds and outpatient department, of which 5 have got nursing institutions, and we run two types of training. One is junior nursing, or midwifery. Another is the senior, that means diploma nursing course, which is accredited by the Bangladesh College of Nursing, who is the affiliated body.

These are the scenario of the cyclone that started from 1970, just before the independence of Bangladesh, and then see the number of casualties is 100,000s. Then in 2013 we have the Rana Plaza disaster in which we have lost 1,127 and injured 2,442.

This is the graph to represent the situation of the cyclone, tornado and flood. And that is very rewarding. When it was so heavy casualties in the earliest stage, how can we reach such a level when the destruction or death rate has come down? That is the community preparedness, cyclone preparedness program, which is the key structure which has been accepted internationally as one of the best examples of disaster mitigation projects. And Bangladesh is a champion, and that was started by the world assembly League of Nations and the founding father of our country, Bangabandhu Sheikh Mujibur Rahman, he started this program first.

And the current activities about the Disaster Nursing have already been given to you. First general draft of curriculum, syllabus and text books have already been completed. And final editing with the chief consultant is underway. We have already mentioned, and will appreciate your help to do the editing, one minute only, involving the nurses and midwives and triage implications of Rana Plaza.

So what way forward? The textbook translation in Bangla, training of teachers and government and non-government nursing instruction, develop guidelines in Bengali for the community-level stakeholders, implementation of the new projects into the JICA, prevention and mitigation to Disaster Nursing Education in coastal belt through the MCH centres, BDRCS will try to introduce the textbook in the government nursing midwifery training, this will be a very difficult hurdle for us to introduce into the governmental institution, because they have an authority, who needs to be convinced about the need for this curriculum, and I would hope that with the help of the Bangladesh Red Crescent Society's governing body and the honourable Prime Minister, we'll be able to introduce this in the curriculum.

So the next challenge is to incorporate Disaster Nursing Education with the existing government nursing curriculum, to ensure post-Disaster Nursing services in Bangladesh, especially in the remote areas, are very difficult with our existing logistic support to retain volunteers, because this program is run by volunteers, at village level especially, the young girls, because after they get married they go to their in-laws house, so we've lost the volunteers, and if they get a job, we've lost the volunteers. So it is a very difficult job for us to maintain the volunteers, to retain the volunteers. Thank you very much for your patience. Thank you.

[See Akbar's presentation powerpoint.p64](#)

**Chairperson:** Thank you Professor Akbar for sharing your insights and experience in Bangladesh. All the best to your next steps, as you mainstream Disaster Nursing Education into the nursing curriculum. Allow me to call on Professor Elsi Hapsari of the Gadjah Mada University to make her presentation.

**Hapsari:** Thank you very much Mr. Jim for introducing me. Good afternoon. This time I would like to present about the present situation and challenge of Disaster Nursing Education at the university in Indonesia and experience of University Gadjah Mada. I would like to explain first that the nursing education in Indonesia is under the Ministry of Health, and under the Ministry of Education. And the Indonesia Red Cross Society did not have any school of nursing, so I think that this is also one of the challenges when we try to apply the textbook that we do within this 3-year project. The outline of my presentation: first it's about the profile of our school of nursing, and then education of Disaster Nursing in undergraduate nursing program and post-graduate nursing program, and next, challenges of Disaster Nursing Education.

This is the location of our university. It is located in Java Island, in Jakarta city. Our university is the oldest university in Indonesia, established in 1946, and now it's the first-ranked university. Recent experience of our university, with disaster situation related to the 2006 Jakarta earthquake and 2010 Mount Merapi eruption.

This is the situation during the earthquake in Jakarta in the year 2006. The number of victims at that time was around 30,000, and 6,700 people dead. And the eruption of Mount Merapi in 2010, since 1548 this Mount Merapi has erupted 69 times, and the last eruption was in 2010.

Our university is located around 20 kilometers from Mount Merapi, and 20 kilometers to the north from the sea. This is the location of our university and also our school of nursing. We offer an undergraduate nursing program since 1998, and a Masters of Nursing program since 2012. Now I will explain about the education of Disaster Nursing in our school of nursing. Since the year of 2008, we applied student centered learning, and before we apply Disaster Nursing Education for our students with student centered learning, we conduct a workshop among lecturers, how they teach Disaster Nursing in their own subjects, and also we did research work with a grant from the government and we included the faculty of medicine, and also faculty of nutrition, to have inter-professional education in disaster work, in disaster management.

So based on that research work, and then we developed the content of the curriculum for our undergraduate students. In the undergraduate program, every semester students learn three blocks of subject, and each block consisted of 6 weeks' education. We put disaster management in the block 4-point-4. It means the student was in the 8th semester, in the fourth year of education, because we consider it is a complex subject that students have to have a basic understanding first, in the nursing subject.

This is the topics that we teach the students. The first is about basic understanding of disaster. Disaster management in national and international level. Laws related to disaster management. Role and function of nurses and other health professions and also non-health profession in disaster. Disaster management in each phase of disaster. Disaster management for vulnerable population, and also disaster simulation.

We apply several learning methods, such as case study. In this case study we play a video and then ask students to have a self-reflection, like when the earthquake occurred in 2006, where were you, and how did you feel? And what do you think about that situation? And next, about small-group discussion, we make a scenario and ask the students in a small group consisting of ten until 12 students to discuss together. And also we invite experts to give lectures for our students and in the seminars we ask students to find a research report, so it's like evidence-based nursing, how students apply the evidence-based nursing in the research work of Disaster Nursing. And also we ask them to have an independent study, and also we teach skills laboratory, including how to do bandaging and resuscitation and so on. And next we set up a one-day field trip and the program includes visiting a disaster-affected area, visiting houses, evacuation shelter for the people who cannot go back to their own house because it was destroyed, and also visiting museum related to the Merapi mountain and also to the earthquake area. And they also visit public health center and hospital and observation center for the activity of Mount Merapi. We ask them in the end to have an assignment. The students in the group have to take care of patients and also have group reflection - how do they feel about the field trip? And last one, we have a disaster simulation. It is a one - day training for the students. We make a scenario and ask them to pretend as a leader or as a member in a team of disaster management. After education, students have a final research work.

This is just like some examples of the titles related to Disaster Nursing that were conducted by our students, such as early breastfeeding initiation, PTSD and also pre-menstrual syndrome.

This is activity in clinical skills when teacher teaches about how to make a bandage for the victims of the disaster, and this is a field trip in post-disaster area and situation in the briefing before the disaster simulation.

Now I will explain about the education of Disaster Nursing in the postgraduate program. We have two specialties in the Masters of Nursing Program. First one is maternity nursing, and the

second one is in paediatric nursing. In the Master level we only have 2-hour lectures. For example this is the curriculum for concentration in maternity nursing. We put the topic of Disaster Nursing in the first semester, a 2-hour lecture, in the subject of contemporary maternity nursing. After they finish the third semester they have an optional thesis topic that they can choose research related to Disaster Nursing. As for specialty in paediatric nursing, it is also a 2-hour lecture in the first semester in the subject of advanced paediatric nursing concepts in family context. And after lectures, like for undergraduate students, it is a 6-week program, 6 credits, and for Masters students, 2-hour lectures, we have an additional activity that is an international seminar. We conduct every year an international seminar. We have a long history of collaboration with Kobe University. And then since 2010 we conduct Disaster Nursing seminar, and this year, 11th international seminar on disasters will be held on March 26th until 29th, 2014. We ask all of the students to join in this seminar.

And I think this is my last part. We also ask the students to have a community service in a post-disaster area. We have a building that was built based on the support from the children of Kobe city. So we make a house, we call it 'Kodomo no Ie', children's house, called Griya Lare Utami, and through this program we conduct early childhood education program, and also women empowerment, because when the mothers take care of the children and bring to this center, the mothers can receive any information related to health, and how to take care of their children. So we built this building in the post-disaster area.

And the challenges in Disaster Nursing Education, I think one thing is that there is no specific national standardised curriculum for Disaster Nursing Education, yet. Some institutions include Disaster Nursing in education as a compulsory subject, others as an optional subject. I think it is similar to the results of research by Professor Sasaki, that contents and methods of teaching are varied among institutions. So through this symposium and seminar I learned a lot of things today. Every three years we have an evaluation of the curriculum for the students, so I think based on the seminar that I followed today and tomorrow. We can make a revision in some important things to be taught to our students in the future. So thank you very much. There are pictures, in Bantul district after the earthquake in 2006. Thank you very much for your attention.

[See Hapsari's presentation powerpoint.p66](#)

**Chairperson:** Thank you very much Professor Hapsari for sharing with us your Disaster Nursing program offered at Bachelor and Master degree levels, including your activities, related to research and community outreach.

Shall we now call on Professor Roykulcharoen to share her experience in Thailand?

**Roykulcharoen:** President of the Japanese Red Cross College of Nursing, honorable guests, first of all I would like to thank you so much inviting me here in this wonderful symposium. For the present situation and challenges on Disaster Nursing Education in Thailand, I have to refer to the Marguerite and Lynn, 2008. They say that "Because of their diverse experience, education and practice settings, nurses are uniquely qualified first leaders, care givers and receivers in any large-scale public health emergency. However, most nurses feel inadequately prepared to function effectively in these types of situations." And if we see the relationship between the disaster nurses and disaster management, we found that this is an emergency global problem, and each country has to be prepared for responding. For the nurses are important



health personnel who take part in several roles and in various phases of disaster. And for the preparation of nurses with appropriate competency is significant.

That's why ICN has established the framework of Disaster Nursing competencies. We all know that they include the prevention or mitigation phase, preparedness phase, response phase, and last one is going to be recovery or rehabilitation phase.

And I would like to share with you that this one is going to be like an overview for the nursing education that's related to the disaster. We have 2 contexts that we found that, if we're looking at a disaster and nurses, we found that Thailand's nursing roles were not clear in helping disaster. And use their own experiences in helping disaster victims. They also had some difficulty working in some disaster situations. And sometimes they were victims themselves.

And if we're looking at disaster and nursing curriculum, we found that the content of the Disaster Nursing were not enough for working in disaster situations. Not every educational institute has passed Disaster Nursing, but most of them try to put this course in the curriculum. And we found that special training course, and post graduated curriculum related to Disaster Nursing and disaster management were not clearly operated yet. And Thai nurses still need competency preparation in disaster management and Disaster Nursing in education institutes and healthcare services institutes. Implementation of Disaster Nursing Education in undergraduate course, the graduate program and continuing education for nurses is necessary. Disaster Nursing Education develops further knowledge and clarifies future challenges related to disaster and contribute to the preparedness of people and communities.

Let me share with you about a subject that we call 'Disaster Nursing'. This one I try to take a look for the institution that have been taught in this subject including our college. Most of them is gonna be get the student no knowledge about the Disaster Nursing, disaster management, the relative disaster organisation, roles of nurses for caring disaster victims in disaster, and basic skill for disaster management, and way to teach - we found that most of them are gonna be like a lecture, give a lecture, and let them do the case study, and after that they have to do a discussion and disaster plan and have to do the self-study. And right now we try to put like an e-learning or audio-visual, or sometimes they make role-plays. And we know that we cannot just learning, teaching in the class, because it's not just for the Disaster Nursing, but we have to do in the real situation. However, in Thailand we don't have a specialty training or the graduate courses for the Disaster Nursing Education, we just teach in the undergraduate level. So if we send our students to the real situation, we have to evaluate whether they can help - they're not a burden to the officer that's already on the site. So we have to put into the disaster management plan for our student.

The content that we already taught is gonna be the concept. Disaster Nursing and disaster management, and if we're looking at the disaster management, we're going to talk about the law and ethics. In disaster situation, preparedness, communities, and like a classify of the disaster victims, transferring, and the last one is going to be first aid. And I cannot put in every detail in this one, and also we also thought about the role of nurses and we have role of disaster management and helping disaster victims. And the last one is going to be transferring victims and related organization.

Even though we don't have the program in the graduate yet, but our faculty tries to have more experience and gain more knowledge. If you taught just only by the lecture but you don't know the real thing to do, you cannot teach the student very well. So that's why the faculty had to go to the project, some other project is gonna be the project.

An agreement between the TRC and IFRC, this one, we remembered that one of the 13 countries affected by the 2004 Indian tsunami, and that's one gonna be have the TRC do a proposal consists of 22 sub-projects, and its key objectives include to increase the response capacity of the communities. The second one is going to be to build a first-aid network at community. The last one is going to be to strengthen the capacity of TRC in disasters. At that time, one of the two fellowships that come here today, assistant professor Wanpen as a project, head project, at that time, and they have a group of workers and they call this project a holistic, community-based healthcare capacity building project. This one is focused on community development strategies, community health, and social network community uniting activities as well as promotion of individuals' physical and mental health. That one is already finished.

Right now we got the funding projects, four funding projects. Why I mention of this project? Because our faculty, like I told you, that we try to get more and more experience and get more knowledge and try to include our students to get participate in that project. So we like coordinate and work together. Let me tell you about two of these projects that got funded by the IFRC. The first one is going to be we prepare the community for first responders. As we know that we cannot just do the Disaster Nursing Education just that happened, the thing that has already happened, or is during happening at that time, but we have to prepare for the disaster or the preparedness phase for every setting, for the victims, for the relatives, for the general people because we don't know why and when the disaster is going to happen. So this one we have to well-prepare the community.

And the second one we're going to do for the follow-up of the communities implemented by the TRC and funded by the tsunami fund 2004. Like I told you that that project already finished, but this one we got another funding, we have to follow that, the thing that they already done. What's happened to the committee after that, after the tsunami. And we did not know where the tsunami is going to happen again, so we do this project. And throughout this project we got funding, approximately 8 million yen. And the another two parts is going to be the health capacity development in students for disaster preparedness. You may see that on the title of this project, we have to teach the students, even though they look small, maybe they cannot help, but in the real situation they are one part of the family. Sometimes they can help their parents. So that's why we try to look at every target. So this one is funded by the Chinese Red Cross.

And the other is going to be for the disaster preparedness volunteer network for the university and college level students. This one is funded by IFRC post-emergency preparedness operation. This one we try to making our student like to be a leader, like training for the trainer. And then we ask for students from another university to participate in this project, including 10 universities, and this one is on the process to prepare for other things. The project that I already mentioned - help capacity development in students for disaster preparedness. This one is already being done. And our student participation in the nursing student have to be include, and the applied knowledge that they learn from the Disaster Nursing Education course in the real situation. And we have a working group from the faculty, to advise them. This one has already finished and successfully.

So my final conclusion for the Disaster Nursing Education in Thailand, in my overview, since I cannot ask the whole members on that, I felt that we have to think best way. When I mention about this it means that it's not just only the adult person. We have to let every generation know about Disaster Nursing, that they can do it, they have the ability which way and when they're going to help. So this one we have to think big in every target, and we have to think in every phase, not just only when the disaster happened, but also we have to prepare and do prevention. It means that we have to know Disaster Nursing as a faculty. If we just teach, but we don't have

the experience or we don't get to the inside of the real situation, maybe we cannot teach very well. So this one we have to think deeply. And even though we can't be a faculty, but as nurses. Nurses have to learn all the specialties or get some training on Disaster Nursing. And start step by step. Why I said that? Because I think that the first start is going to be from ourselves. If we would like to know about Disaster Nursing, in each individual they learn more, and we can teach our students, and teach our generation to know about Disaster Nursing and have the important to focus on that. And the last one is going to be act fast. Because when a disaster happens, we cannot be slow. We have to do as soon as possible. So right now we have to do our best for the nursing education in Thailand till graduation day. Thank you so much for your attention.

[See Roykulcharoen's presentation powerpoint.p69](#)

**Chairperson:** Thank you very much professor for sharing your Disaster Nursing program in the context of disaster management framework, as well as the programs that you are undertaking in order to provide students with experience in Disaster Nursing, both at community and organization level, so that they will be able to start small, dig deep, think deeply and act fast in emergencies and disasters. Thank you very much. So, we shall proceed. And the last, but not the least, of course, will be a presentation from Professor Ohara from this college.

**Ohara:** Thank you very much. Title of my presentation is "Current situation and findings of Disaster Nursing Education in Japan". Similar to other Asian neighbours, we have various kinds of disasters in Japan. On the rise with such Disasters Nursing activities and Disaster Nursing Education has been evolved, so I would like to share with you the evolution as well as the challenges we face today.

The number of nurses is about 877,000 in Japan. At present, there are about 200 nursing colleges, and universities. In April, it is said that the number will increase to 220. We are already in an ageing society, but we will be in a super-ageing society soon.

So given this fact, three years ago in 2011, as you are all aware, we had the Great East Japan Earthquake and Tsunami disaster and the damage was quite extensive and we often heard the word "out of our assumption", not something we could foresee, or foresaw, and then there was the nuclear power plant accident as well, so under all of these elements, people saved people's lives. And it was not only nurses, but for other relief workers, they were able to prove their effectiveness in such a disaster.

And those of us who are involved in Disaster Nursing, there are several challenges we have faced. Out of them, we need to collaborate with experts of other nursing fields. We need to collaborate more and we need to work together with other academic societies. We have to exchange information with such other professions. Thirdly, it is not only in the acute phase, but you need to look into the health and living issues of the disaster people in the mid- to long-term. And as the fourth point, we need to foster more leaders who have the ability to coordinate. We need to have more of those nurses who specialise in Disaster Nursing.

Next, I'll speak about how Disaster Nursing developed. In 1995 we had the Great Hanshin-Awaji Earthquake, 19 years ago, and that launched the Japan Society of Disaster Nursing in 1998. Then Japanese Nursing Association started the activity to dispatch Disaster Assistance Nurses to the disaster site. In 2004, Disaster Assistance Nurses was dispatched to the Chuetsu earthquake. Since then many nurses were dispatched, and this activity has become a

systematic practice. And in 2010, the World Society of Disaster Nursing was established, and Japanese society of Disaster Nursing served as a base. And in 2013, for the first time, the Japan Association of Nursing program in universities actually accredited Disaster Nursing field as certified nursing specialist (CNS) and we are currently waiting for the official go-ahead and approval. So this is the backdrop, and at our JRCCN we have been the forerunner of Disaster Nursing Education.

In 2005, we started to include Disaster Nursing. In 2008 we established Master program, and in 2013 we established certified nurse specialist course (CNS), and in 2013 we established PhD. And from 2014 April, we will have the DNGL. It's a 5-year program, a doctor's degree for the global leader on Disaster Nursing, so-called leaders and elites that will be able to excel in the international arena. So this is the overview of what we're conducting at our university.

So let's look into the specific curriculum, especially the basic education as well as the Master program. And we currently have eight domains of basic education. In the undergraduate stages, and the red part here is Disaster Nursing, together with the international nursing. We teach our students the basics of Disaster Nursing and the total is 120 hours in the 4 years. So you can see quite a large sum of their study period and mandatory. There are 15 hours for one credit, and in the second and third year, as they become sophomores and juniors, they study Disaster Nursing as an elective subject. One is the nursing activity in the acute stage, and second is about disaster and mental health care. So in the third year they will be able to take one credit for 30 hours, and in the second half of the year, the second semester, they will go into the actual living conditions and local activities. Disaster Nursing I consist of 30 hours of activities that they study in the second year, this is also mandatory, Disaster Nursing theory II, with 30 hours for 1 credit. They study disaster and mental health care. They study not only about medicine but more about community health care rooted in the local communities. So a total of 120 hours of Disaster Nursing could be provided at our university. And this is the framework of Disaster Nursing Education. There are six domains. And because we're a Red Cross university, this is not only domestic, but also international activity is something that we need to teach. And in Disaster Nursing the uniqueness and the basics and also about self-help and triage basics, and also actual practices and drills, and mental care. So this is the framework that the students will go through in four years. So let's look at it in more detail. Let's look at the course called Nursing in Disaster Emergencies. And this is during the acute phase. First we will have a desk simulation. So the students will get a grasp and an image of what a disaster zone looks like. And they will be able to use simulation tools, and technical practice, so the actual essential techniques in disaster relief, and physical assessment, and full-scale exercises. So it's divided into four different stages, and this is what it looks like, the courses the students go through. And the outcome of this training, by going through this exercise, the knowledge and skill, we can compare it from before taking the course and after the course, and self-assessment shows that they are actually getting a higher score after they go through this course, and also as an extracurricular activity, we work together with the local residents, and this is one unique feature we offer. And for the freshmen, as a part of their curriculum, they study together with the local community. And at the same time, we have overseas trainees every year. And so undergraduates as well as graduate school students are working together, so globalisation of Disaster Nursing actually takes place on the ground for our students in such occasions. And when an actual disaster hits, not all of the students can be sent, but the volunteer to go into the temporary shelters and housings... so they go into evacuation shelters and temporary housing, and various occasions, this is where the students could actually contribute, and they learn first hand by coming into contact with the disaster-hit people. So undergraduates, we make sure that they get the basics and essential points, and so that will give them the motivation for self-help as well as helping others. And for the Masters course, for the CNS students, so what are the features, or

the uniqueness of our course? Well, first of all we use both the domestic and the international network of the Red Cross. That's our strength. And also by each cycle we make sure we have ample field work, and that could be a support from mid to long term for the victims. And also regional disaster preparedness as well as hospital disaster preparedness. And this photograph shows our work in Bangladesh. And CNS nurses will have to have all these abilities: advanced nursing practice, consultation, coordination, collaboration skills, research capabilities, education, and also ethical consideration. So we still have the challenge of how to make sure the CNS will have all of these skills, and the students are working with such field work you see in the photographs. So I hope that gives you some pictures. And last but not least, there are some challenges. We currently have 26 credits in CNS. When it becomes 38 credits we need to evolve our syllabus. And we have to improve our... the methods we adopt in teaching, so that will be our immediate challenge. Thank you for your attention.

[See Ohara's presentation powerpoint.p72](#)

**Chairperson:** Thank you very much professor Ohara for that excellent presentation concerning the evolution of Disaster Nursing Education in Japan, for elaborating on your programs as well as different initiatives to give your Disaster Nursing students opportunities and hands-on experience both as simulated environment or as well emergency operations. So we have completed all presentations.

As this stage may I ask our presenters to come up to the platform. We will now proceed to the question and answer portion. We are now inviting questions from the floor to specific presentations, or if you have a general question related to the topic. May we ask colleagues who have questions to kindly raise your hand, introduce yourself, and considering time limitations, if you can kindly phrase your questions briefly and direct to the point. Can we see any hand? Or while giving time to our audience, do we have any statement from this stage, which you were not able to elaborate or mention earlier? Professor Akbar?

**Akbar:** At the outset, I must thank all the presenters. But one thing struck me. Among the four countries, we're at the various stages of development. So that in one way is very good. Somebody has some distance, and somebody has yet to start walking. So these group of fours, most probably if we help each other we can ultimately reach our destination. And I think for which we need more collaboration, particularly with the four countries, and also the people, those who are organising this workshop. And this can be a unique opportunity to help the southeast Asian region, particularly in the Disaster Nursing, because though we understand something about Disaster Nursing, but I think in the nursing education yet Bangladesh has to go a long way. For which we need some assistance from other friends so that we can convince our government, the College of Nursing, the faculty of nursing, so that they can adapt Disaster Nursing as a very important tool for helping the suffering people who are struck by disaster. Thank you.

**Chairperson:** Thank you Professor Akbar. Do we have questions from the floor at the moment? Professor Ohara, please.

**Ohara:** Well, Professor Akbar commented, and about this let me say something. For the past three years, we visited the disaster-hit areas, we have sent out our students to the disaster-hit areas in Bangladesh. And well, the community midwife assessment competencies and the power of actions were very good resources for students to learn, and so they were impressed with their competencies. They did at Embassy H maternal child health centers. So I think that it is very

important for us to let the government officials know about the importance of community or Disaster Nursing, and I think it's your job, Professor Akbar. What do you think?

**Akbar:** I agree with it, because as a responsible citizen and at the same time heading the Bangladesh Red Crescent Society's establishment, I think this is a very important job to convince the various departments, but I think in Bangladesh, adaptation of any new idea sometimes is very difficult, so in a humble way, I can assure the Bangladesh nursing college will start a short course of Disaster Nursing which can be gradually expanded. So with our own resources, we can introduce the curriculum to the student nurses so that they can equip themselves more with the phenomenon of Disaster Nursing, but I am very grateful to you for your comment. Though we have not done any formal education in Disaster Nursing, but nurses and community midwives most probably learn by practical experiences the problem they are facing, because these are their day to day problems. So they are already good, so if they are given any, much training then they will be more efficient in managing or attending that situation. Thank you.

**Chairperson:** Yes, Professor Tuazon.

**Professor Tuazon:** Thank you. Thank you to all the presenters. I'm particularly interested with Professor Ohara. I'm particularly interested about the trend. Japan seems to be the trendsetter now in formal education in Disaster Nursing. And you have identified and you are developing a CNS, the clinical nurse specialists in Disaster Nursing. Where do you anticipate, what kind of jobs? Who will hire these nurses? Where will they eventually go upon graduation from that CNS program? As I ask this, I am reinforcing the idea because we do promote... I come from the Philippines, I'm sorry, I'm with the University of the Philippines, Manila. I am also the secretariat of a nursing network on emergencies. So I would like to reinforce and encourage this movement for advanced practice nursing for our region. So I particularly would like to know, what do you anticipate the jobs are? Are there positions waiting for these nurses? Thank you.

**Chairperson:** Yes, Professor Ohara.

**Ohara:** Thank you for your question. First of all, of course the CNS course that the Japanese universities network had decided on, there have been various fields in the past... so the Japan Association of Nursing programs and universities have come up with this, and the six domains are something that we needed to cover, as I explained before, and in the case of Disaster Nursing, when you bring and interpret the specifics, what are the capabilities that we need from our CNS NDN? That's still something that we haven't defined. That's the challenge. So advanced nursing practice, that's something that everybody knows what it entails. Like, it's about consultation, coordination, collaboration, research, education and research capabilities, all of these, so they need research capabilities and education capabilities, that's a given, but in the actual field, on the ground, as leaders, could they actually be able to get here and be a leader? How could we obtain that through training and education? Within a team, if they are graduate school students, they are not going to be leaders immediately, so how are we going to make sure... it's not only about lectures. It's skills, actions. How can we make sure that these graduates in CNS will actually be able to exercise their leadership? I think the way we teach, the way we train, that will be an issue. And we have to also ensure a place upon graduation, they would actually have a place to practice, and the hospitals as well as head of nurses as well as the government bodies, I think, will have to collaborate with them to come up with a specific definition. These are the challenges we face today. I hope together with our colleagues in the Philippines we could exchange ideas and opinions on this matter.

**Jiraporn:** Jiraporn from Thailand, thank you very much for a very wonderful session, and I really agree with Doctor Akbar that from the countries that presented today, we are in the different stage of development. So I would like to ask a question about... because since you, Professor Ohara, you told us about the development of nursing education in Disaster Nursing in Japan, and you talked about the curriculum prepared, right? And for your suggestion for those who already graduated, and how about the program or the curriculum for capacity building? Do you have that kind of suggestion? Because right now, as you know, in our country the Red Cross nursing college, they start a disaster curriculum at undergraduate level, but for those who were in the community, especially community nurses, how could we help them have more capacity in Disaster Nursing? Thank you.

**Ohara:** Thank you very much for that. The Disaster Nursing is in the basic education. It's only four years ago that it was introduced as a part of a formal education and curriculum, and maybe for the Self Defense Forces medical school and also at the Red Cross universities, we might have to have that. But many other universities and other nursing schools, they didn't have any disaster training. And after graduation they obtained these skills through lifelong education, and also some other short courses provided by different private entities. Because depending on the capabilities of the actual nurses out there, they will find an appropriate training course and they go through training. So that's the current status quo, or de facto, but we need to have a more systematic maybe way of offering such training and somebody has to unify that and make sure they coordinate. And we do identify that requirement and need, and at Red Cross we originally had the emergency relief team education training, but from next year we are trying to revamp this program and we actually conducted a curriculum shift and change. And Professor Maeda is here, who was in charge of the curriculum reform, so maybe they could give you some input. But what I suggested when we came to the stage of reforming the curriculum was that you go into the evacuation shelter and it's not about the nurses just waiting and being receptive. They have to go in there to the community to give the assistance. And more about the mid and long term nursing, and also the coordinators must be something we have to actually train and foster, because there's a need for that. And that actually was incorporated and reflected in the curriculum revision. And that's the kind of information I've obtained, so Professor Maeda, maybe you would like to elaborate a bit more on how we're going about this?

**Maeda:** My name is Maeda. I work at the Red Cross university on such training, and this was just kind of out of the blue so I haven't had any preparation but at the Japanese Red Cross we are putting efforts into the emergency relief workers, especially for the emergency teams. And at nursing universities you have a formal curriculum, but at the Red Cross we originally have a vocational school for nurses and we have been providing basic education for such emergency relief. And there's many hospitals, there's about 92 affiliated hospitals for the Red Cross, and those who have obtained a job in one of these facilities, within a given 3 years, we call them the Red Cross relief workers, and they go through this training as relief workers for disaster, and they obtain skills and knowledge pertaining to the disaster. So that's the status quo.

And to our training center they dispatch, the hospitals dispatch these trainees, and it is divided into first, second and third training levels, and from this fiscal year, the first level, this will be the highest level, where we will be fostering and training leaders who will go into the disaster-hit zones in the acute phase and who could actually exercise coordination and leadership skills, and in the second level, that's adding another, which is the mental health care, where they can actually engage in psychological care. And the third level is among different types of disasters, they will go into local communities and serve as a coordinator. So those skills will be trained. And hopefully from the next fiscal year, starting in April, we will be able to provide that training.

So at Red Cross here in Japan, we are putting all our efforts into beefing up our emergency relief activities, and this is also true in the hospitals and currently the coordinator role is taken on by the nurses right now. So that's where we are today.

**Chairperson:** Thank you for elaborating the impressive program in terms of training nurses in Disaster Nursing. Providing them the opportunity to experience to practice what they have learned is certainly a dilemma in some environments. They are trained, but the opportunity to really be exposed to practice is not really established. And we had the opportunity to be in a way of that learning process through the emergency response units if that's a part of some sort of learning path for disaster nurses, not only in Japan but also overseas. Thank you. Professor Akbar?

**Akbar:** Thank you for giving me the floor. I have one comment. Will this course for Disaster Nursing be incorporated into the general nursing course that everybody going through training as a midwife or as a nurse has the knowledge and the skill about Disaster Nursing, otherwise there may be not enough scope for very highly expert people in the field. So how can you make the compromise that to put in the course and curriculum of general nursing so that everybody is skilled with this? Thank you.

**Chairperson:** Can we hear from Thailand or Indonesia? In terms of whether the learning opportunities are really mainstream to the disaster. I mean to the nursing curriculum, whether that's Masters or doctoral level.

**Hapsari:** Thank you very much. I will try to answer. For our school, for undergraduate program it is a compulsory subject for Disaster Nursing. And in the Masters program, as I mentioned, it is only a 2-hour lecture and focuses on the results of research related to the vulnerable population. For example, in the specialty of paediatric nursing, two hours is just like a highlight of what is the recent situation related to children in disaster situations, and so on. But we don't have any program in doctoral course yet, so far.

**Roykulcharoen:** In Thailand, as we mentioned, we just have a course in the curriculum but we don't have the graduate or special training course yet. But in the future we try to think that we are going to have like a specialty curriculum that may be created by the TRC and which cooperated with our association or connection that we have together. That's in the future. And the other one that we try to do is put our students into the real situation. If you remember the flooding that has been happened on the last two years. So we let students go to the site and let them do the project. We run health screening, like if we find some problem for the victims, we transfer to the hospital. And the other one, we keep the program for the student who live in the shelter but they just feel lonely, no toys, something like that, so we bring our students to make them have a lively. So that's one we try to do. And in the future I hope that we can make a curriculum together. Thank you.

**Chairperson:** Any insight or comment, Professor Ohara, in terms of mainstreaming your programs?

**Ohara:** I don't know if I can answer the question the right way. Talking about Disaster Nursing, in the basic education they will have to provide the curriculum on Disaster Nursing and after they graduate from the colleges, we are living in a disaster-prone country and then, when a disaster happens, they have to respond to the disaster-hit area, so it is a part of the mission of nurses, and they have to learn. Well, I think it should be regarded as the lifelong learning of CNS and general level nursing education. And so I think the DNGL project, so there are four levels of education.



It may not be applied to all of the countries, it's still uncertain, but in the context of Japan, and in the context of my university here, it just happens that conditionally we have the track record and we have been very fortunate to obtain the support. Our president is there, so maybe she might think that we were lucky, but I think we have these four stages of basic, as well as graduation CNS and DNGL, and the need level of each country might be different, and through its track record and actual experience, I think we'll have to start to see what is truly required of, and I think we have to propose that, and all of us here today who are leaders, we have to advocate that, and educate that.

**Chairperson:** It is said that as far as Disaster Nursing Education is an evolving area, which operates within the overall, the broader area of disaster management. As we know, it is not only health, but there are other sectors, led by a coordinating body. Disaster management concepts, practices, mechanisms, systems, are also evolving. So in terms of your experience, in terms of your programs in your countries, how do you keep pace with these rapidly changing concepts, mechanisms, systems, integrate into your Disaster Nursing curricula. Anybody?

**Hapsari:** Thank you very much. Yes, we understand that the changing concept is rapid in disaster management, but also we have in our university, I think there is like one year, two years, every three years, evolution of the curriculum, so what we did when there is a new concept or new information related to Disaster Nursing, what we did is we invite experts and teach the students about the recent issues. And I think this year we receive a lot of professors and lecturers from Japan, including Professor Ohara also, and we ask them to teach our students during their visit to Indonesia, so I think it is a very good chance for our students to be exposed to experts in Disaster Nursing. And I think in the future we have to consider about long-distance learning or communication so we do not have to go to Indonesia or Japan, but we can use technology so that we can follow the recent updates in Disaster Nursing, I think.

**Chairperson:** Any other members of the panel who wish to add?

**Akbar:** I think I try to incorporate a very complex sort of problem, so I think personally those countries who have a very new introduction of this subject, they are in one stage, but those who have already reached to certain stage, they have to have a different approach. So for a country like Bangladesh, where this has already not started very efficiently, I think we can now, for the time being, incorporate into the basic nursing courses and curriculum, so that these trained nurses can take the leadership and get training at the ToT, training of trainers, so that they can also propagate this training to the community level workers. So I think we need more experts for those nurses so that they can be teachers of the teachers. So that is a different situation in Bangladesh in the context. Thank you.

**Chairperson:** Considering that we don't have time anymore, one of the things that perhaps need to be continued in order to promote Disaster Nursing and Disaster Nursing Education — while a number of things have been mentioned already, — is to continue this dialogue at different levels, exchanging information and exchanging knowledge. Incidentally this is also this year, 2014, is the 100th year of the Thai Red Cross College of Nursing and they are organizing an international conference. Can we request Professor Roykulcharoen to share something about this conference?

**Roykulcharoen:** Thank you so much for giving me the time to invite all of you here, or your colleagues, to come to Thailand, because this coming June we're going to celebrate the 100th year of the Thai Red Cross College of Nursing. So that's why we have the first Red Cross/Red Crescent international conference in 2014, we call, the short name is RCINC. So this one, we have a co-host for the IFRC, ICRC and Japanese Red Cross College of Nursing as well. This

conference is going to be held in April 23rd to 25th, and Her Royal Highness Princess Sirindhorn is going to be the president of this conference. She's going to open the conference and give the special speech, and after that we are going to invite all the speakers from different areas who have expertise in Disaster Nursing to come in this event. So please welcome to Thailand and enjoy this conference. I hope that at this time the situation in Bangkok is going to be fine. OK? And you can visit our website [www.rcinc2014.com](http://www.rcinc2014.com). And right now we are calling for abstracts, and at least 15 nations have already submitted abstracts, so I hope that you are going to be the one to join this conference and send an abstract to us. Thank you so much. And see you in Thailand.

**Chairperson:** Thank you very much professor. So at this stage we would like to thank our distinguished panelists for their insightful presentation and for sharing their thoughts on Disaster Nursing Education, particularly the experiences in their countries. Thank you for Professor Sasaki for sharing your report on the survey of Disaster Nursing Education in Asia. And to the country presenters, Professor Akbar, Professor Hapsari, Professor Roykulcharoen, Professor Ohara, thank you very much. Thank you also to our audience, participants for your interest in Disaster Nursing Education. Finally, thanks to the Japanese Red Cross College of Nursing, for making this event happen.

Thank you very much. We would like to thank all the panelists and the coordinator. This concludes today's symposium. We will have another session from 10 in the morning tomorrow. I hope you will come back tomorrow and join us again.

# Abstracts

## Organizing Community in Disaster Prevention Abstract

Mir Abdul Karim, Field Coordinator, Bangladesh  
Red Crescent Society, Health Department

**Background:** Following Cyclone Aila of 2009, score of community development initiatives (CDI) were implemented through community based organization (CBO) in Munshingonj Union of Shyamnagor sub district of Satkhira District in Bangladesh in the southern coastal region for disaster prevention.

**Methods:** The role of CBOs was assessed using quantitative and qualitative methods from November to December 2013. Complete enumeration of total 5,078 households reveals 2,742 (54%) moved out during Aila and 594 (12%) households with a population of 2,730 were selected randomly. Interview of heads of 6 out of 18 nongovernmental organizations (NGOs) engaged in disaster prevention in Munshiganj. Repair and maintenance of embankment and rural road network, tree plantation in line with policy of the government, increase access to drinking water, hygienic toilet, low cost cooking stove, solar power generation, rain water harvesting and growing salt resistant paddy since 2012 are prominent component of CDI. Microcredit, distribution of human driven van, fishing boat and net are prominent livelihood support activities. Prominent disaster prevention activities includes tree plantation on government land and distribution of the profit between government (55%) and the landless victim (45%), rebuilding of rural road network, riverbank and raising homestead land.

**Result:** Majority (61%) of the respondents were female and above 30 years of age. More than two third (67%) female and a little over half (51%) of male respondents had no education. majority of the household earn their livelihood as day labor (33%) and fisher man (30%). Only 13% of the household heads were engaged with some kind of business. Rests of the household heads are engaged in service, grocery shops, driving of engine vehicle and wood cutting etc. A little over one third (34%) of the households do not possess any land and one fifth of the total households have more than 20 decimal or more land. Reported knowledge in the community about prevention of disaster through CBOs in the implementation of CDIs are notable and tree plantation and rising homestead land being the main focus of CDI.

**Conclusion:** Reported practice of moving cyclone centre, saving of emergency food items during Aila still remains a concern.

**Recommendation:** Improving knowledge on disaster prevention should be a continuous process but practice level must be improved and more insights needed to build sustained resilient community.

# Assessment of health impact after cyclone AILA in Bangladesh

## Abstract

Sonali Rani Das, Nursing Instructor,  
Holy Family Hospital

Health impact after Aila in southern coastal region at Munshingonj Union of Shyamnagor Upazila, Satkhira District in Bangladesh has been assessed between October to December 2013. Both quantitative and qualitative methods were employed. For the assessment, a sub sample of 407 enumerated heads of household were interviewed to ascertain the type of disaster associated injuries, episodes of illness in the household, pregnancy outcome and death of household members.

Majority of the injured members were aged over 15 years and proportion of male was higher (61%). About 12% injured member did not seek any health care from the provider. Self care in the form of home remedy was used by 35% of injure members. Local village doctor treated 44% of injured household members. Of 3 deaths, 1 occurred to people in 5-14 years age group and remaining 2 was aged 50 years more. While antenatal care (ANC) visit was and postnatal care (PNC) visit was higher among 19 women in and around Aila period compared to 43 women in last one year. Almost one third of 19 women in and around Aila period and 44% of 43 women in last one year delivered at the BDRCS MCH Center.

The integration and contribution of nursing and midwifery in health strategies for disaster preparedness, mitigation, response and recovery as crucial and vital to provide timely care to victims, especially the more vulnerable persons of the community, such as the elderly, women, children, the disabled and the poor (Ullah,2013).The BDRCS MCH centers in the southern region are uniquely positioned to serve as first referral or static centre will be able to have positive impact on community health as well as monitoring changes in the disease pattern as result of climate change.

## RESEARCH ON DISASTER NURSING FROM PERSPEKTIVE OF NURSING STUDENTS AND LECTURERS Indonesian Red Cross Society

### Abstract

Habib Priyono, Psychotherapist  
Bogor Hospital, Indonesian Red Cross Society

**Background:** Disasters can pose a health threat to the community affected. The impact can be catastrophic injury, trauma, worsening of chronic disease, infections, mental health problems and death. Nurses play an important role in disaster situation. The ability of nurses to provide nursing care in a disaster cycle is very important to reduce the impact of disasters. Level of knowledge of disaster that each individual has is different. It may resulted in various responses of individuals when faced with emergencies, limited number of nursing teachers have been trained on Disaster Nursing and few educational institution delivered Disaster Nursing subject. The purpose are to measure the level of knowledge of Disaster Nursing among nursing students and to investigate the experiences of teaching Disaster Nursing among nursing teachers in Indonesia

**Method:** It is a descriptive research with cross sectional design and focus group discussion. Subject are 40 nursing students and 10 nursing teachers, a set of questionnaire consisted of 20 questions constructed based on ICN Framework

**Result and conclusion:** level of knowledge of Disaster Nursing on student is low, teachers face many challenges in teaching Disaster Nursing for nursing students, need to standardized curriculum and enough references are needed for further development of Disaster Nursing Education, and producing a good quality of Disaster Nursing textbook may contribute to the further development of Disaster Nursing Education in Indonesia.

## **Health Impact and Adaptation of the Elderly Affected by Floods in Ladkrabang District, Bangkok**

### **Abstract**

Somjinda Chompunud, Ph.D.  
Nursing Instructor, The Thai Red Cross College of Nursing

This research was conducted with the objective of investigating the health impact and adaptation of the elderly affected by floods in Ladkrabang District, Bangkok. Data was collected from elderly flood victims during November, 2011 to January, 2012 in four communities for a total of 290 informants. Data was collected by conducting interviews from November of 2012 to January of 2013. Data was analyzed with descriptive statistics in percentage and mean values.

According to the research findings, the elderly informants had previous experience with flooding, but the massive flooding in 2011 was more severe than any they had experienced in the past. The majority of the elderly (66.9%) perceived their current health as being moderately healthy with slight injuries and illnesses as compared to other elderly informants who perceived their health as being comparable to the health of other elderly people (47.6%) and those with chronic diseases (74.5%). The chronic disease most frequently encountered was hypertension (46.9%). Physical health impact included diseases such as athlete's foot (28.3%) and prickly heat (23.1%). The accidents encountered were slipping/tripping/falling (6.6%). In terms of medical treatment, the impact on health was that the elderly had no access to the medications prescribed by doctors, were unable to see doctors by appointment and found it inconvenient to travel to health service institutions (68.2%, 66.9% and 66.5%, respectively). Health impacts were encountered in the form of mental health issues (24.3%). The mental health issues encountered included insomnia, constant stress and tension, attention deficit, feelings of discontent and depression, respectively.

Elderly Adaptation - 53.4% of the elderly informants incurred damages as a result of this flood disaster in terms of household and appliance damages; 72.8% of the elderly received assistance in various aspects such as monetary aid, health care and treatment for illness and injury, etc.; 89.3% of the elderly decided not to be relocated from their homes to other places because they thought their houses remained habitable, were concerned about their property, thought the flooding would not last for long, were attached to their residences and did not want to stay at evacuation centers, etc. The group of elderly who were evacuated was found to stay with children and grandchildren or other relatives. When the readiness of the elderly for a flood disaster was considered in terms of various aspects, the elderly were found to have stored food

such as rice, dry foods, clean drinking water, medications and emergency equipment. The informants had gathered important documents and valuables in plastic bags and followed up on news and information on television and in community broadcasting announcements. Moreover, the elderly had also cooperated with communities in digging drainage ditches. Furthermore, they had made preparations for their property and belongings by adjusting their environmental conditions and storing things in high places, putting sandbags in place, preparing things to be moved, building cement walls, adjusting their homes for better height and preparing water pumps, respectively.

The research findings can be used as basic data for the communities and agencies involved in planning and making preparations for public disasters in order to protect and minimize the severity of disasters suitably for elderly flood victims who are a vulnerable group. Educational institutes can apply the findings to modify or supplement teaching curriculum for public Disaster Nursing in vulnerable groups in order to ensure that nurses are able to provide care for elderly disaster victims with added quality.

## **The Effect on Interactive Teaching Method on Achievement and Prevention-Mitigation, Preparedness and Response Competencies of Undergraduate Nursing Students based on International Council of Nurses (ICN) Framework of Disaster Nursing Competencies**

### **Abstract**

Assist. Prof. Wanpen Inkaew  
The Thai Red Cross College of Nursing

Thai Red Cross College of Nursing has a significant mission to produce nursing graduates with high professional competence, knowledge in disaster management, ethics and quality at international standard. The objectives of this research is to study the Effect of Interactive Teaching Method on Achievement and Prevention-mitigation, Preparedness and Response Competencies of undergraduate nursing students, based on International Council of Nurses framework of Disaster Nursing competencies. The Interactive Teaching Method has been developed through the study of the documentation and researches relevant to the nursing competencies, based on ICN's framework, teaching method, teaching media, studying the concept of interactive teaching method and opinions of nursing teachers from the educational institutions, skilled nurses, Disaster Nursing expert from the Japanese Red Cross College of Nursing. Then the teaching method and media have been developed. The researchers have piloted the developed interactive teaching methods and media and brought the result from piloting to modify them. The experimental research has been implemented by mean of Pretest-Posttest control group design with the nursing students in year 3 who took Emergency and Disaster Nursing course. The results of the research revealed the following:

1. Average achievement of trial group is statistically significantly higher than the controlled group by 0.05.
2. After the studying, both trial and controlled group have statistically significantly higher average self rating score on all three competencies at 0.001.

3. Before the studying, average self rating score of both trial and controlled group on these competencies were similar. However, after the studying, average self rating of the trial group is statistically significantly higher than the controlled group at 0.001.

4. The samples have positive attitude towards Disaster Nursing and were satisfied with the teaching method. The method has been described to motivate the learning and develop the analytical thinking. The teachers encouraged the learning and advised when the students faced with the problems. The students also opined that this kind of teaching is useful for them and even their families. Average score of opinion on the teaching method of trial group is higher than the controlled group.

## **Toward the Prevention of Secondary PTSD of Care Providers during a Disaster**

### **Abstract**

Asako Takei, Keiko Komiya, Tomomi Takano, Konami Horii, Nazuna Naito

The Great East Japan Earthquake, which occurred on March 11, 2011, was an unprecedented complex disaster causing enormous damages in extensive areas. Immediately after the earthquake, many nurses rushed to the disaster-stricken area as aid providers and implemented diverse relief activities. Rescuers' secondary PTSD has long been recognized, but the strategy for its prevention has not been quite established. In this research, we conducted an interview survey with 11 nurses engaged in relief activities in the disaster-stricken area during the Great East Japan Earthquake. The aim of this survey was to clarify their experiences in the field work, and actual support they received from surrounding people, in order to explore the strategy necessary to prevent secondary PTSD in nurses who act as rescuers.

As a result, the following became clear.

1. Experiences in the field : Rescuers were shocked by the horrific situation of the disaster-stricken area, which was beyond expectation. They were additionally shocked from direct exposure to victims' emotions, such as survivors' guilt, anger and sorrow. Also, rescuers felt powerless and incompetent because of the overwhelming gap between the needs in the disaster-stricken area and the support and resources they could provide. As a result, they fell into a state of compassion fatigue.

2. Effects after relief activities: Rescuers experienced a hyperarousal symptom, which is the state of being unable to rest though exhausted, physical symptoms, anger toward colleagues, etc. Some tried not to recall their experiences. They wanted to talk about their experiences but felt they could not be understood.

3. Effective support for rescuers: ① Specific and practical orientation in the disaster-stricken area, mutual support and learning among rescuers, sharing of information and experiences, and other on-the-spot support. ② Rest and physical care after returning from the disaster-stricken area and having someone to talk to about their experiences at an appropriate time, working to find the meaning of relief activities, and other continual support after the activities.

4. Involvement that did not serve well: unrealistic expectations and empty praise from surrounding people, formal debriefing sessions, and conflict among rescuers and disagreements among rescuers. These were more frustrating than beneficial.

Based on the above, we organized a strategy to prevent secondary PTSD into the following four

points.

1. Preliminary education: Information on secondary PTSD must be supplied in an empathetic way, such as giving opportunities to listen to others' experiences and presenting specific examples. Guarantee rescuers, in advance, a place and opportunity to receive support after relief activities.
2. Briefing in the actual field: Take sufficient time for practical orientation after rescuers enter the disaster-stricken area and for the handing over of work from predecessors to new rescuers.
3. Support during relief activities: Coordinators conduct daily meetings for the sharing of experiences and mutual learning, indirectly support rescuers, and coordinate disaster victims' needs with rescuers' activities.
4. After-activity follow-up system: 1) at least three days off after returning home, 2) establishment of a support system such as debriefing sessions attended by rescuers and a specialist, and individual interviews with a mental therapy specialist; 3) the organization administrator needs to understand the harsh conditions of relief activities in the disaster area, and make consideration on rescuers' work allocation and other things after their coming home; 4) obligating attendance in formal briefing sessions at the workplace may result in making rescuers relive traumatic experiences, so careful consideration should be made; 5) take time to work to find the meaning of relief activities.

## **The Experiences of, and Support for People with Chronic Illnesses and Disabilities during a Disaster – with Focus on the Great East Japan Earthquake**

Keiko Honjo, Hanae Miura, Hiroko Shimomura, Atsuko Niwa, Miyako Wada,  
Atsuko Izumi, Yukari Sumiya, Chifumi Amarume, Itsuko Yamamoto  
(Japanese Red Cross College of Nursing)

### **I. Purpose :**

The purpose of this study is to clarify the experiences of, and support for people with illnesses and disabilities during the Great East Japan Earthquake.

### **II. Method :**

Regarding the experiences of, and support for people with illnesses and disabilities during the Great East Japan Earthquake, we searched and analyzed the following: (1) newspaper articles (one year from March 2011 to March 2012); (2) literature (1995 to 2013); and (3) information and suggestions from homepages of related educated societies after the Great East Japan Earthquake. We searched using "earthquake disaster" combined with main chronic diseases and disabilities (high blood pressure, diabetes, respiration, brain infraction, cardiac failure, dialysis, and intractable disease) as keywords. We conducted research after receiving an approval by the Research and Ethical Review Board of the Japanese Red Cross College of Nursing.

### **III. Results :**

During the Great East Japan Earthquake, damages caused not only by the earthquake, but also the tsunami and subsequent blackout affected those with illnesses and disabilities. Some who could not move on their own failed to escape and died. Some experienced anxiety and had their medical conditions worsen as their drugs were swept away or could not be obtained. For people



treated with an artificial respirator, for example, the blackout after the earthquake was directly connected to death. The environment without self-help devices and high-salt emergency foods combined with inadequate water intake aggravated underlying diseases and caused complications. In some cases new diseases such as cardiac failure occurred after the disaster. Furthermore, some medical staff members, who supported the disaster victims, had strokes. Support for people with illnesses and disabilities included patrol by specialists and residents in the disaster-stricken area, as well as traveling medical and mental care by medical specialists dispatched from various places. Some patients who were treated with dialysis, which needed to be done regularly and continually, moved to remote places in groups. Regarding high blood pressure, brain infarction, etc., education on prevention and early discovery was provided through newspapers and other media. In addition, respective specialized societies provided suggestions on the prevention of diseases to the national government, and they established Q&A sections on their homepages. Medical staff also supported one another.

#### **IV. Consideration :**

It is necessary to enrich the support for people with illnesses and disabilities and their families even in normal times so that they can have more skills useful in the event of a disaster such as a blackout. It is necessary to equip evacuation centers with self-help devices, and create a stockpile of low-salt emergency foods and foods for people with allergies. Furthermore, because some people develop chronic illnesses and disabilities after a disaster, it is important that medical professionals aggressively educate people on prevention. To nursing students, we consider it important to teach in classes these experiences of people with illnesses and disabilities during a disaster. It is also necessary to know, in normal times, where needed information, medicine, etc., can be obtained in the event of a disaster,

**Key words :** The Great East Japan Earthquake, The Experiences of, and Support for People with Chronic Illnesses and Disabilities

## **Effect of exercise program for elderly disaster victims of the Great East Japan Disaster**

Chieko Greiner, Chizuru Ootoguro, Kana Matsuo, Kyoko Chiba, Noriko Kuwata,  
Chizuru Sakaguchi

### **Purpose**

The purpose of this study was to develop an exercise program to achieve sustenance and improvement of physical function for elderly disaster victims of the Great East Japan Disaster and verify the effectiveness of the program.

### **Methods**

Participants were 45 elderly disaster victims dwelling in temporary shelters or staying with their relatives of the shelters' neighbors, from whom consent was obtained for this study. A pamphlet describing stretches and muscle training exercises was developed and distributed to the participants. The exercise classes based on the pamphlet were staged once a week for six months at a facility in a temporary housing area. The one-hour classes held consisted of exercises (30-40 minutes) and tea-time (20-30 minutes). A portable calendar and a stamp for

exercise were also distributed to each participant. They brought the calendar when they came to the exercise class and sealed a sticker on the attendance day to check their continuation. When they did exercise by themselves, they stamped on it. Functional reach test (FRT), time of standing on one foot (TSF), timed Up & Go Test (UGT), and sit on chair and stand up test (SCST) were measured before, and after three and six months from the exercise classes. Data was analyzed using ANOVA. This study was approved by a research ethics review board at the first author's affiliated university. We explained the following in writing and orally: the outline of the research, respect for their free will, keeping their privacy, announcing its result in retaining their anonymity.

### **Results**

27 (female 26) of 45 participants could continue the classes for six months. Mean age was 70.1 (SD=5.0). As results analyzed using ANOVA, FRT ( $p=.000$ ), TSF ( $p=.007$ ), and SCST ( $p=.000$ ) showed significant improvements.

### **Conclusion**

Inferior limb muscle power and balance functions improved after participation with the exercise program. Due to the distribution of calendars and stamps to participants, it was shown to increase participant's motivation for doing exercises both in and out of the classes. Holding tea-time after classes to promote participants' interaction encouraged participants to continue attending the classes.

## References;

<b>Outline of the Disaster Nursing Education Project .....</b>	<b>55</b>
By Hiroshi Higashiura, Japanese Red Cross College of Nursing	
<b>Report on development of Disaster Nursing textbook</b>	
1)Bangladesh.....	56
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<b>Symposium</b>	
1)Jim Catanpongan, International Federation of the Red Cross and Crescent Societey .....	69
2)Ikumi Sasaki, Japanese Red Cross College of Nursing.....	71
3)Mohammad Serajul Akbar, MP, Bangladesh Rec Crescent Society.....	74
4)Elisi Dwi Hapsari, Gadjaj Mada University .....	74
5)Varunyupa Roykulchareon, Thai Red Cross College of Nursing .....	79
6)Mariko Ohara, Japanese Red Cross College of Nursing .....	82

# Outline of the Disaster Nursing Education Project

**Hiroshi Higashiura**

**Japanese Red Cross College of Nursing**



The slide features the Japanese Red Cross College of Nursing logo at the top center. Below it, the text reads: "Disaster Nursing Education Project in collaboration with disaster prone countries in Asia". Underneath, it states: "The Supported Program for the Strategic Research Foundation at Private Universities of Ministry of Education, Culture, Sports, Science and Technology (2013/12 ~ 2013/14)". At the bottom, it identifies "Prof. Hiroshi Higashiura, Head of the project, The Japanese Red Cross College of Nursing". The Japanese Red Cross logo and name are at the bottom center.

### Aim of the Project

The Japanese Red Cross College of Nursing shall be developed and recognized as the Center of Disaster Nursing Education and Researches at national and international level.

- Researches at the Various Nursing Field
- To support the development of disaster nursing education in disaster prone countries



### Fellow Researchers

- Bangladesh  
Mir Abdul Karim  
Sonal Rani Das
- Indonesia  
Habib Priyono  
Mahfud
- Thai  
Somjinda Chompunud  
Wanpen Inkaew



A group photograph of seven individuals, including researchers and staff, standing in front of a building.



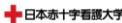
### Fellowship Program

- Consultation with the Asia & Pacific Zone of the International Federation of the Red Cross and Red Crescent  
Jagan Chapagain, Jim CATAMPONGAN
- Invitation to 16 NSs in Asia region
- Interview with the candidates
- Session with the Fellows in the College
- Field trips to the Affected areas, Kobe, etc.





### Researches

- Present status and findings on teaching methodology of disaster nursing in Asian countries (Survey)
- Support and assistance to the people living with diseases and disorders in disaster
- Study on enhancement of body function of the elderly affected by East Japan Great Earthquake
- Study on prevention of the secondary PTSD for care providers in disaster.




# Report on development of Disaster Nursing Textbook in Bangladesh, Indonesia and Thailand



## Bangladesh



**A Textbook on Disaster Nursing Education  
For  
Nurse-Midwives**





Fellows: Mir Abdul Karim, Asst. Director  
Sonali Rani Das, Nursing Instructor  
Funded by : JRCCN  
Supported by : BDRCS  
2011- 2014



**Introduction**

The world has been vulnerable because of both the natural and manmade disaster. The occurrence of disasters is high in the South Asia with massive destruction of property and human lives. Emergency and disasters frequently affect in Bangladesh with adverse effects on socio-economy and public health. The most common disaster related factors include geographic setting, demographic pressure, environmental degradation, poverty, and political reasons etc.

The government has to spend a lot of money for the reconstruction of damaged infrastructure as well as recovery of the affected people. The country has learnt a good lesson from the cyclone AILA - 2009 .





**Continue**

Besides, the Bangladesh Red Crescent Society has been playing a crucial role through its different organizations, especially in the coastal and vulnerable communities.



BDRCS-Nurse-Midwives have no knowledge or limited knowledge on disaster nursing. Even though in Bangladesh BNC no disaster textbook curriculum and syllabus for the Nurse-Midwives.

From the perspectives as a auxiliary to the government BDRCS has decided to produce the textbook on disaster nursing particularly for Nurse-Midwives to develop their capacity building in disasters with the help of JRCCN through fellowship program. The is great opportunity for our country .





**Objectives of the Fellowship Program**

- Development of curriculum syllabus and Textbook
- Development teaching materials
- Conduct two own research



**Contents of the presentation**

- Why a textbook was felt needed
- Process of preparing the textbook
- Contents
- Way forward



**Objectives to Developed Textbook**

- Enhance knowledge and skills of Nurse-Midwives in disaster preparedness activities.
- Acquire knowledge, skills and attitude of Nurse-Midwives in disaster response activities.
- Understand the roles of Nurse-Midwives during disaster and emergency.
- Be able to be familiar with disaster recovery activities



Month/year	Activities
April 2012	Shared JRCCN knowledge and experience with stakeholders
“	Communicated with WHO, UNICEF, Government and private Nursing colleges
May 2012	Conducted experience sharing workshop on 10 <sup>th</sup> May 2012
“	Conducted meeting with DNS and Registrar Bangladesh Nursing council



Month/year	Activities
June	Discussed with BDRCS authorities for own research
“	Select research area
“	Literature review
“	Feedback incorporate in Curriculum, syllabus and textbook
“	Disaster nursing subject submitted to the BDRCS for approval

Month/year	Activities
July 2012	Conducted Meeting with principal of Nursing college for development of curriculum syllabus and textbook
“	Participated MRO at water logged and flood effected area for 14 days in July 2012
August 2012	Communicated with government and GO, NGO and IFRC about arrangement of 1 <sup>st</sup> workshop on Draft curriculum and syllabus and textbook.

Month/year	Activities
December 2012	Participated model lecture arranged by TRCCN from 21-25 December 2012
“	Included new knowledge and skills from TRCCN model lecture in draft curriculum, syllabus and textbook. Total proposed hours 220 (Theory -72 and Practice -148 hours)
January 2013	Meeting with stakeholders and BDRCS & Holly family authorities on development of curriculum, syllabus and textbook.

Month/year	Activities
January 2013	Final draft of Textbook submitted to BDRCS Managing board for approval
February 2013	Developed teaching materials (Poster, Triage Tag, Video and CPR model).
March-July 2013	Participated Rana Plaza tragedy and prepared study report and triage practice
September to December 2013	Textbook final draft print and researche Draft completed and submitted to the BDRCS managing board



## Process of preparing the textbook



- National Workshop
- Working Group
- Pilot
- Incorporate research findings
- Review
- Editing
- Printing



## Workshop and meeting



## What's meaning to do fieldwork for you?



**Essential point:**  
Going to disaster area, getting the information, listening to affected people



## Contents follows ICN Competencies



Chapter	Topics	No. of pages	Time allocated
01	<b>Background Information</b> RCRC movement BDRCS Disaster prevention policies & countermeasure	33	
02	<b>Geography, history and Countermeasures</b> Geographical background of Bangladesh Disasters in Bangladesh Disaster prevention & countermeasures by GoB	33	
03	<b>Basic concepts on disasters</b> Concepts of Disaster Types of disasters Effects of disaster Disaster management cycle	33	



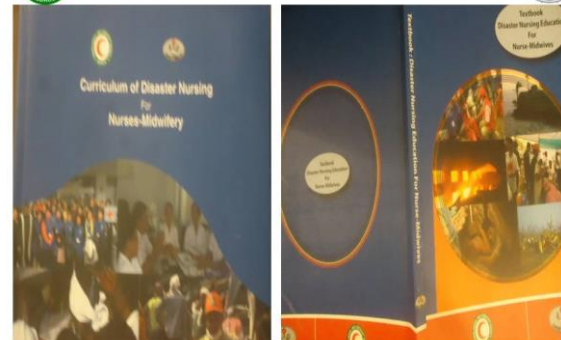
## Contents follows ICN Competencies



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03	<b>Basic concepts on disasters</b> Concepts of Disaster Types of disasters Effects of disaster Disaster management cycle	33	



## Curriculum & Textbook



## Research & Case Study



## Way forward



- Translation-February 2014
- Training of Trainers-Preparation of guide and conduct 1 To-March 2014
- Trainers introduce in their own institutions - April 2014
- Monitoring by the fellows-Apr-June 2014
- Merging in to the national **Nurse-Midwifery** curriculum by the end of 2014





### Remarks of the fellows



Disaster nursing issue need to incorporate with government national curriculum.  
 Develop module for different groups  
 Limitation of time

### What is the output through the Project?



ted area for Nurses  
 ster nursing to  
 ation with other  
 person



### Thanks





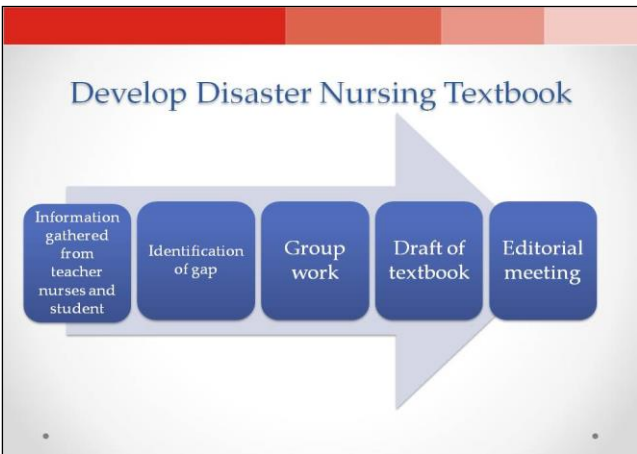
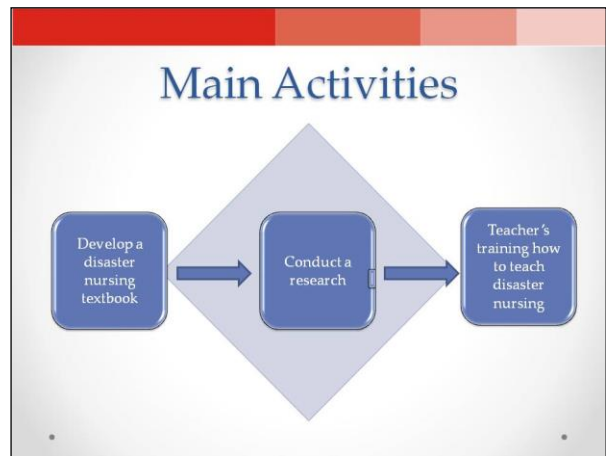
# Indonesia




Palang Merah Indonesia

## Activities Report Disaster Nursing Project January 2012 – January 2014

Mahfud  
Habib Priyono



### Step 1. First Workshop on Develop Disaster Nursing Textbook

Time	Lectures	Participants
• 21-23 October 2012	<ul style="list-style-type: none"> <li>Indonesia Red Cross Society</li> <li>Director of Nursing MoH</li> <li>Indonesian Emergency Nurses Association</li> <li>School of Nursing</li> <li>University of Indonesia</li> <li>Gadjah Mada University Jogjakarta</li> </ul>	<ul style="list-style-type: none"> <li>• 18 School of Nursing teachers</li> <li>• 7 Nurses</li> <li>• 2 Midwives</li> </ul>

- ### The Objectives of Workshop
1. Related knowledge on disaster nursing
  2. Share knowledge, skills and experiences on disaster nursing
  3. Develop draft content textbook on disaster nursing

- ### Topic of Groups Work on 1<sup>st</sup> Workshop
1. Foundation disaster & disaster management
  2. Disaster Nursing. (Content : Triage, The importance of medical medicine and nursing care in acute phase, physical assessment)
  3. Disaster nursing on vulnerability groups
  4. Psychological impact of disaster & mental health
  5. Nursing disaster in chronic phases
  6. Nursing disaster in recovery phases

## Result and Evaluation

- A. Draft of textbook topics, consist 7 chapters :
1. Chapter 1 : History and Present Situation of Disaster
  2. Chapter 2 : Fundamental Knowledge on Disaster Nursing
  3. Chapter 3 : Nursing Activities in Acute Phase
  4. Chapter 4 : Nursing Activities Recovery Phase
  5. Chapter 5 : Disaster Nursing Activities in Silent Phase
  6. Chapter 6 : Vulnerable Groups in Disaster
  7. Chapter 7 : Heart Caring for the Victim and Relief Care Provides
- B. Forming the editorial committee members, consisting 6 teachers who have experience to teach disaster nursing.
- C. Decided the editor from Gadjah Mada University

## Evaluation

The Results of questionnaire from participants who attended workshop :

1. Workshop was useful (80%)
2. Increasing of knowledge and skill on disaster nursing (43%)
3. Necessary to develop disaster nursing textbook

## Discussion with Committee Editorial members



## Step 2. Editorial Committee Meeting

### Objectives

1. Editing draft of textbook based on suggestion from JRCCN
2. Develop the draft of textbook

### Outcome

1. Index of drat textbook
2. Content of draft text book (Indonesian version)

## Editorial Meeting



## Editorial Meeting



## Step 3. Second Workshop Teacher Training : How to Teach Disaster Nursing

Time	Lectures	Participants
• 22-23 July 2013	<ul style="list-style-type: none"> <li>• The Japanese Red Cross College of Nursing</li> <li>• Indonesia Red Cross Society</li> <li>• Bogor School of Nursing</li> <li>• Gadjah Mada University Jogjakarta</li> <li>• Sarjito Hospital Jogjakarta</li> </ul>	<ul style="list-style-type: none"> <li>• Total participants : 56 (Nursing School and Midwife) from West Java Province, Central Java Province, Sumatra Province, Borneo Province, Jogjakarta Province, Sulawesi Province</li> </ul>

## Content of Teacher's Training

### Lectures

1. Fundamental Knowledge on disaster nursing
2. How to teach disaster to students
3. How to build curricula of disaster nursing
4. Psychological impact of disaster and mental health
5. Shelter nursing, emergency puskesmas/hospital management
6. Disaster nursing aspect related to disaster cycle : experience from Japan

### Drills

1. Active listening in disaster site
2. Triage in disaster site



## Result and Evaluation From Teacher's Training

- **Method of evaluation:** self reflection, Pre test and post test with using questionnaire comprised of 40 question regarding kind of disaster, disaster cycle, disaster nursing competencies, diseases related to disaster, disaster stress, community health, and triage
- **Results :**
- **Self reflection :** 33 participants were hoping that after join in this teacher's training they could actively contribute to the community
- **Increasing of knowledge and skill on teaching disaster nursing (73%)**
- **Suggestion from participants** were need more topic on simulation on disaster nursing not only drill of triage in disaster but also psychological first aids, communication in disaster

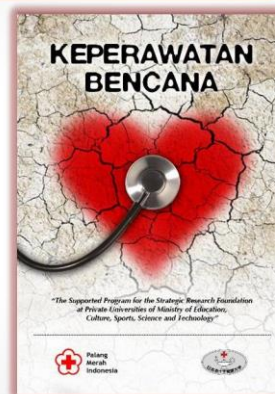


## Step 4. Develop Textbook on Disaster Nursing

List of content of textbook

Chapter :

1. Fundamental on Disaster
2. Disaster Management
3. Nursing Activities on Acute Phase
4. Nursing Activities on Recovery Phase
5. Nursing Activities on Pre Incident Phase (Mitigation/Prevention and Preparedness)
6. Nursing Activities on Vulnerable Groups (Women Pregnant, Pediatric, People with Chronic Illness, Elderly, Disable)
7. Mental Health on Disaster



## Next Planning

- Ask for suggestion and advice from Indonesian National Nurses Organization
- Workshop on utilize on textbook
- Share the textbook to some of Nursing School in Indonesia
- Textbook translation in English

## Conducted Researches

1. Experience and knowledge of disaster nursing among nursing students
2. Experience and challenges in teaching disaster nursing, collaborated with Ms. Elsi Dwi Hapsari (Gadjah Mada University) and Prof. Mariko Ohara (The Japanese Red Cross College of Nursing)

## Acknowledge

1. The Japanese Red Cross College of Nursing for three years grant of : "the supported program for the strategic research foundation at private universities of ministry of education, culture, sports, science and technology" in Japan
2. The Indonesian Red Cross Society (PMI)



Thank you  
Terima Kasih



# Thailand

**Thailand**  
**Disaster Nursing Education Project**  
**Overall activities and outcomes**  
**January 2012 – January 2014**  
 Wanpen Inkaew  
 Somjinda  
 Chompunud



**1. Improve disaster nursing syllabus and textbook**

**Methodology**  
**Step 1 Information gathering**

<b>Competency</b> ICN TNC	<b>Higher education framework</b> TQF TNC CU TRCN	<b>Knowledge, suggestion from experts</b> - 1 <sup>st</sup> workshop (22-23 Jul, 2012) - 30 participants from throughout the country (15 faculties from nursing colleges/faculties and 15 nurses from hospital)	- Learn from JRCN and field visit to affected area in Japan - Literature review
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TNC – Thailand Nurses and Midwifery Council TQF – Thailand Qualification Framework  
 CU – Chulalongkorn University TRCN – Thai Red Cross College of Nursing







1<sup>st</sup> Workshop in Bangkok, Thailand



Step 2 Draft syllabus and textbook

**Syllabus**

- 2<sup>nd</sup> / 3<sup>rd</sup> year nursing student
- Compulsory subject
- 3 credit (2 theory, 1 drill)

**Textbook**

- 1<sup>st</sup> draft : 9 chapters
- Cover 4 domains 10 competencies



**Step 3 Trial syllabus and textbook**  
**On 22 – 23 Dec. 2012**

- : 2<sup>nd</sup> year nursing students (70)
- : 4 chapters trial (cover 3 phases)
- : Students' suggestion
  - content of textbook is appropriate
  - Average satisfaction score for teaching method is 4.78 (Total is 5.00)



**Step 4 Discuss with JRCCN faculties and**  
**2<sup>nd</sup> time visit to affected area in**  
**Japan**  
**28 Jan. – 8 Feb. 2013**

**Final draft of syllabus and textbook**

<b>Syllabus</b>	- 3 <sup>rd</sup> year nursing students - compulsory subject - 3 credit (2 theory, 1 drill)
<b>Textbook</b>	- 12 chapters - Cover 4 domains 10 competencies





**List of contents of textbook**

Chapter

7. Casualty Handling and Referral
8. Nursing Care for Recovery
9. Psychological Care in Disaster Nursing
10. Nursing Care for Vulnerable Group in Disaster
11. Organizations involved in Disaster Management
12. Ethical, Education, and Research in Disaster Nursing

**List of contents of textbook**

Chapter

1. Overview of Disaster and Disaster Management
2. Overview of Disaster Nursing
3. Communication and Coordination in Disaster Management
4. Nursing Care for Prevention, Mitigation, and Preparedness
  5. Disaster Triage
  6. First Aid

**Experts for Editing the textbook**

1. Ms.Pensiri Mekhora  
Deputy Director of First Aid and Health Care Training Center, The Thai Red Cross Society
2. Ms.Pavinee Yuprasert  
Head of Relief Division, Relief and Public Health Bureau, The Thai Red Cross Society
3. Assist. Prof. Wallapa Soonthornnut  
Faculty of Nursing, Wongchawarit University
4. Assist. Prof. Archara Pumdoung  
The Thai Red Cross College of Nursing

**2. Develop supportive teaching materials**

**Methodology**

- Step 1 Discuss and select topics from syllabus to develop materials
  - \* Preparedness
  - \* Triage
  - \* Psychological first aid
  - \* First aid
  - \* Casualty handling

**Step 2 Analyze, design, and develop**

2013 : Developed

- Teaching materials : bone fractures

for first aid and casualty handling

**Step 2 Analyze, design, and develop**

2012 : Developed 3 materials

- Magnetic models (Map, personnel, building, equipment, vehicle etc.) for preparedness and first aid
- Interactive games for triage
- Interactive games for communication in psychological first aid

The photograph shows several educational materials. At the top, there are five colorful paper figures (white, green, grey, white, yellow) standing on a wooden surface. Below them are three sets of magnetic models and interactive games. Each set includes a figure and a sign with Thai text. The signs describe: 1) Personnel and equipment for preparedness, 2) Triage, and 3) Communication in psychological first aid.





Step 3 Trial supportive teaching materials  
 : On 22-23 Dec. 2012 including with trial syllabus and textbook  
 : Suggestion of students

Suggestion of students

- very interesting
- make more understand of content
- more kinds /types of materials needed
- average score for material appropriation = 4.85 (Total 5.00)





**Step 4 Finalize supportive teaching materials**

- Magnetic model for preparedness and first aid
- Interactive games for triage
- Interactive games for communication in psychological first aid
- Material (bone fractures) for first aid and casualty handling

**3. Do two researches**

**1 : Health Impact and Adaptation of the Elderly Affected by Flood in Ladkrabang District, Bangkok**

**2 : The Effect on Interactive Teaching Method on Achievement and Prevention-Mitigation, Preparedness, and Response Competencies of Undergraduate Nursing Students based on International Council of Nurses (ICN) Framework of Disaster Nursing Competencies**

**Way forward**

- ❑ Disseminate the textbook to colleges/faculties of nursing, hospitals especially in disaster affected areas, Thailand Nurses Association and Thailand Nurses and midwifery Council.
- ❑ Strengthening disaster nursing networks in Thailand
- ❑ Raise awareness colleges/faculties of nursing to add disaster nursing in curriculum.

**Conclusion**

For 3 years project :

- ❑ Enhance our knowledge and profoundly understanding on disaster nursing
- ❑ Expand networking in disaster nursing

Finally we would like to thanks

- **JRCCN** : for initiate this project, advice, support, encouragement, and funding
- **TRCN & our colleges** : for support and sharing their ideas
- **Our family** : for their continuous assistant, encouragement, and support

ありがとう  
**Thank you**  
**ขอขอบคุณ (Kob Kon Ka)**

# Symposium

Jim Catanpongan

International Federation of the Red Cross and Crescent Societies

## Symposium on the Present Situation and Challenges on Disaster Nursing Education

Japanese Red Cross College of Nursing  
24 January 2014 | Tokyo, Japan

### Why talk about DN education?

Number and severity of hazard occurrence are increasing, particularly weather-related events.

**Natural catastrophes worldwide, 1980 – 2011**  
Source: Munich RE 2012

### Why talk about DN education?

Large majority of hazards occur in Asia Pacific, particularly storms and floods.

### Why talk about DN education?

People at risk – good and bad news!

- Fewer people die due to weather-related hazards
- Fewer people affected by disasters in 2011
- Economic growth in developing countries led to rising literacy, reduced vulnerability.

### Why talk about DN education?

- BUT – World's population is growing rapidly!
- Poor countries continue to suffer substantial deaths and damages, esp. those with conflict and political instability
- Pressure on food, water and energy to sustain
- Women, children particularly vulnerable

### Why talk about DN education?

- Nurses have critical roles to play
  - Largest group of committed health personnel
  - Have diverse expertise
  - Positioned in communities, working with communities
  - Mobilised to respond to emergencies and disasters
- However, nurses themselves feel not ready to be involved in the complex and challenging arena of disaster response

## Competency framework as basis for DN education



## Presentations/Speakers -

- Survey of disaster nursing education in Asia  
- Prof. Ikumi Sasaki
- Insights on the status and challenges, as well as initiatives to advance DN education
  - Bangladesh - Prof. Dr M S Akbar
  - Indonesia - Asst. Prof. Elsi Dwi Hapsari
  - Thailand - Asst. Prof. Dr Varunyupa Roykulchareon
  - Japan - Prof. Mariko Ohara



**The Current Situation of Disasters and Disaster Nursing Education in Asian Universities**  
**アジア圏の看護系大学における災害看護教育の現状と課題**

Ikumi Sasaki, Mariko Ohara, Hiroshi Higashiura,  
 Tomoko Nishida and Naoko Okamoto  
 佐々木 幾美、小原真理子、東浦洋、西田朋子、岡本菜穂子



The Japanese Red Cross College of Nursing  
 日本赤十字看護大学

**INTRODUCTION AND PURPOSE**

**【INTRODUCTION】**

- 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 disaster nursing were still at an early stage of development.

**【PURPOSE】** The purpose of the study is to clarify the scope of and problems related to disasters and disaster nursing education in Asian nursing colleges and universities.

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**METHODS-1**

**【Design】** Descriptive design (Fact-finding Survey)  
**【Area】** 16 Asian countries including Japan  
**【Subject】** Japan:164 universities and/or nursing departments  
 Asian countries except Japan:256 Universities and/or nursing departments

- The questionnaire was distributed to presidents or deans of the nursing universities and/or nursing departments.
- We asked them to give the attached questionnaire to appropriate persons within the Department of Nursing Faculty who teach courses on "disaster nursing" would be most appropriate.

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**METHODS-2**

**【Sample】**

Country	N	Country	N	Country	N	Country	N
Bangladesh (BGD)	2	Indonesia (IDN)	49	Myanmar (MMR)	1	Singapore (SGP)	1
Cambodia (KHM)	2	Japan (JPN)	164	Nepal (NPL)	1	Taiwan (TWN)	14
China (CHN)	48	Korea (KOR)	27	Pakistan (PAK)	3	Thailand (THA)	24
India (IND)	22	Malaysia (MYS)	8	Philippines (PHL)	50	Vietnam (VNM)	4

\* About Philippines, we select 50 universities from listed 417 universities.

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**DESIGN and METHODS-3**

**【Period】** From February to April in2013  
**【Data Collection】** Data collection was by mail or email .  
**【Contents】** Self-administered questionnaire consisting of demographics, content of disaster nursing education, educational content for disaster nursing, teacher who teach disaster nursing, and others.  
**【Data Analysis】** Descriptive statistics were calculated using the Statistical Package for Social Sciences Version 21.  
**【Ethical Consideration】** This research was approved by the Ethics Review Committee of the Japanese Red Cross College of Nursing, Japan (Reference Number 2012-89).

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**RESULTS-1: SUBJECT CHARACTERISTIC**

Participants: 89 universities (Response rate: 21.2%)

Country	N (%)	Country	N (%)	Country	N (%)	Country	N (%)
Bangladesh	0 (0.0%)	Indonesia	8 (16.3%)	Myanmar	0 (0.0%)	Singapore	0 (0.0%)
Cambodia	1 (50.0%)	Japan	56 (34.1%)	Nepal	0 (0.0%)	Taiwan	1 (7.1%)
China	1 (2.8%)	Korea	1 (3.7%)	Pakistan	0 (0.0%)	Thailand	7 (29.2%)
India	4 (18.2%)	Malaysia	3 (37.5%)	Philippines	7 (14.0%)	Vietnam	0 (0.0%)

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**Mohammad Serajul Akbar, MP**  
**Bangladesh Red Crescent Society**

### DISASTER NURSING EDUCATION IN BANGLADESH: STATE AND CHALLENGES

Professor Dr. M. S. Akbar, M.P.  
FRCP (ED), FRCP (IRE), FCPS, DCH (Glasgow), FMP

Chairman  
 Bangladesh Red Crescent Society

### Country Information

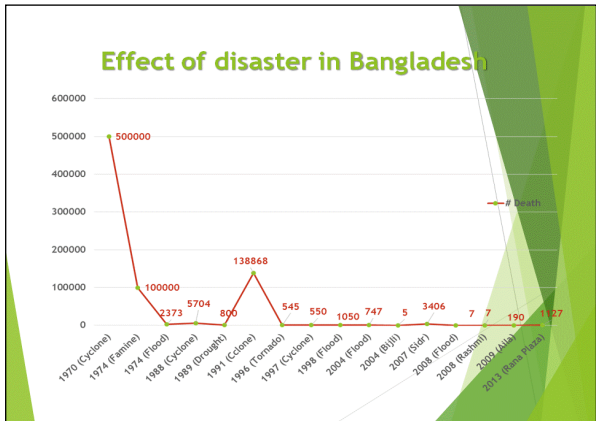
- ▶ Bangladesh is a developing country.
- ▶ The area of the country is 147,570 square kilometers.
- ▶ The population is approximately 164,298,000. Geographically it's southern part is covered by the Bay of Bengal.
- ▶ Geographical location, impacts of global climate change and effects of its existing weather, every year the country is affected by natural disaster.
- ▶ It is the 6<sup>th</sup> risk-prone zone for natural disaster in the world (according to UN Survey, 2011)

### BDRCS Health Program

- ▶ Holy Family Red Crescent Hospital-1
- ▶ Holy Family Red Crescent Medical College-1
- ▶ BDRCS General Hospital-4
- ▶ BDRCS Maternal & Child Health Centre-56
- ▶ BDRCS Outdoor Clinic-1
- ▶ BDRCS Eye Clinic-2
- ▶ Red Crescent Blood Centers-8
- ▶ BDRCS B A Siddique Nursing Training School
- ▶ Midwifery Training Institute – 5
- ▶ Medical Relief Program

### Disaster at glance in Bangladesh

YEAR	DISASTER	DEATHS	INJURED	MISSED
1970	CYCLONE	500,000	100,0000	1 MILLION
1974	FAMINE/MONGA	1,00,000	N/M	0
1988	FLOOD	2373	8000-10000	125
1988	CYCLONE	5704	15000-20000	453
1989	DROUGHT	800	N/M	0
1991	CYCLONE	138,868	234567	5000-6000
1996	TORNADO	545	200000	0
1997	CYCLONE	550	2000-30000	0
1998	FLOOD	1050	7680	344
2004	FLOOD	747	5460	77
2004	BIJLI	5	16	
2007	SIDR	3406	55282	23
2008	RASMI	07	N/M	
2009	AILA	190	7130	123
2013	Rana Plaza	1127	2442	



### Current Activities of Disaster Nursing Education & Research Program

- ▶ Final draft of Curriculum, syllabus and textbook have completed and final editing by the chief consultant is under way
- ▶ Involvement of nurses, midwives at disaster like Rana Plaza tragedy
- ▶ Triage implication at Rana Plaza victims
- ▶ Dissemination workshop on Disaster Nursing (DN)
- ▶ Research work by two fellows have completed the course on fellowship program (2011-Mar 2014) with research work.



### Way Forward

- ▶ Textbook Translation in Bangla
- ▶ ToT with government and non government nursing teachers and instructors
- ▶ Develop guideline in Bangla for the community level stakeholders
- ▶ Implementation of new project (JICA) “ Prevention and mitigation through disaster nursing education” in costal belt MCH centers
- ▶ BDRCS will try to introduce the text book in the Government nursing midwifery training. A steering committee will formed BDRCS by using its costal MCH centers may involve in the research aiming to find out the influence climate changes on health

### Challenges

- ▶ To incorporate Disaster Nursing Education with existing government Nursing curriculum is big challenge now
- ▶ To ensure post disaster nursing services in rural Bangladesh, specially at remote areas are very difficult with our existing logistic support
- ▶ To retain Volunteers at village level, specially young girls

### Disaster in Bangladesh in Picture



Sidr 2007: Sathkhir



Aila 2009: Sathkira



Flood 1988: Village view



Flood 1988: Urban view



Thank You



Symposium on the Present Situation and Challenges on Disaster Nursing Education  
 JRRCN, Tokyo, 24 January 2014




**Present Situation and Challenge of the Disaster Nursing Education at the Universities in Indonesia: Experience of Universitas Gadjah Mada**

Elsi Dwi Hapsari, BN, MS, DS  
 School of Nursing, Faculty of Medicine  
 Universitas Gadjah Mada, INDONESIA

**Outline**

- Profile of School of Nursing, Faculty of Medicine, Universitas Gadjah Mada
- Education of Disaster Nursing in Universitas Gadjah Mada
  - Undergraduate nursing program
  - Postgraduate nursing program
- Challenges of Disaster Nursing Education

**Location of Universitas Gadjah Mada**




MAP OF INDONESIA

- ✓ Located in Java Island
- ✓ Established in 1946 (the oldest university in Indonesia)
- ✓ 1<sup>st</sup> rank university in Indonesia

Experience with disaster situation:  
 2006 Yogyakarta earthquake  
 2010 Mt. Merapi eruption

**Earthquake in Yogyakarta 2006**  
 ジョグジャカルタ地震



Victims : More than 30,000 were injured; Death: 6,700  
 被害者: 30000人以上が負傷、死亡: 6700人

**Eruption of Mount Merapi 2010**



- ▣ Since 1548, has erupted for 69 times
- ▣ The youngest mountain in the south part of Jawa Island and located in subduction zone of Australia-Indo plant and Eurasia
- ▣ Height: 2,968 m
- ▣ Type: stratovolcano
- ▣ Latest eruption: 2010

**Universitas Gadjah Mada**





Administration office,  
 Universitas Gadjah Mada

School of Nursing, Faculty of Medicine  
 - Undergraduate and Master of Nursing Program -

Undergraduate nursing program offered since 1998  
 Master of nursing program offered since 2012





## Education of Disaster Nursing in Postgraduate Nursing Program

### Curriculum Flow of Master of Nursing Program Concentration: Maternity Nursing

SEMESTER IV	THESIS (8)					
SEMESTER III	Compulsory Courses		Recommended Elective Courses		Elective Courses	
	Qualitative Research		Clinical Practice in Maternity Ward	Application of Clinical Nursing Practice	Patient Safety	Quality Assurance
	(2)		(2)	(2)	(2)	(1)
SEMESTER II	Compulsory Courses			Recommended Elective Courses		
	Evidence-based Practice	Pedagogy in Nursing	Quantitative Research and Biostatistics	Application of Nursing Theories and Approach of NANDA, NOC, NIC in Maternity Nursing	Woman Health Promotion	Maternal and Neonatal Health in Family Context
	(2)	(2)	(3)	(2)	(2)	(2)
SEMESTER I	Compulsory Courses					Recommended Elective Course
	Science in Nursing	Trend and Issue in Nursing	Leadership in Nursing	Ethics and Law in Nursing	Interprofessional Education	Contemporary Maternity Nursing
	(4)	(2)	(2)	(2)	(2)	(2)

Disaster nursing education for 2 hours lecture in the 1<sup>st</sup> semester, Subject: Contemporary maternity nursing + optional thesis topic

### Curriculum Flow of Master of Nursing Program Concentration: Pediatric Nursing

SEMESTER IV	THESIS (8 sks)						
SEMESTER III	Compulsory Course	Recommended Elective Courses				Elective Courses	
	Qualitative Research	Advanced Pediatric Nursing II	Pharmacology in Pediatric	Advanced Nursing Management in Pediatric Patients	Patient Safety	Quality Assurance	
	(2)	(1)	(1)	(1)	(2)	(1)	
SEMESTER II	Compulsory Course			Recommended Elective Courses			
	Evidence-based Practice	Pedagogy in Nursing	Quantitative Research and Biostatistics	Application of Nursing Theories and Nursing Process	Advanced Pediatric Nursing I	Advanced Assessment in Pediatric Nursing	
	(2)	(2)	(3)	(2)	(2)	(2)	
SEMESTER I	Compulsory Course					Recommended Elective Course	
	Science in Nursing	Trend and Issue in Nursing	Leadership in Nursing	Ethics and Law in Nursing	Interprofessional Education	Advanced Pediatric Nursing Concept in Family Context	
	(4)	(2)	(2)	(2)	(2)	(2)	

Disaster nursing education for 2 hours lecture in the 1<sup>st</sup> semester, Subject: Advanced Pediatric Nursing Concept in Family Context + optional thesis topic

### Collaboration Between School of Nursing Faculty of Medicine UGM and Kobe University Graduate School of Health Sciences, Japan

**The 11th International Seminar  
Humanity and Social Activity in Disaster Situation**  
Main Meeting Area 1 (Hall, Dr. Jogiep Sugiarto, BUNIC 11 - 10 551 1 - 01, 20 08 08)

**Speaker's Registration:**  
Deadline: 15 March 2014  
Registration Fee: Rp. 100,000.00  
Registration Fee: Rp. 500,000.00  
Registration Fee: Rp. 1,000,000.00  
Registration Fee: Rp. 2,000,000.00  
Registration Fee: Rp. 3,000,000.00  
Registration Fee: Rp. 4,000,000.00  
Registration Fee: Rp. 5,000,000.00  
Registration Fee: Rp. 6,000,000.00  
Registration Fee: Rp. 7,000,000.00  
Registration Fee: Rp. 8,000,000.00  
Registration Fee: Rp. 9,000,000.00  
Registration Fee: Rp. 10,000,000.00

- Since 2000
- Undergraduate and master of nursing program students join in the seminar
- This year: 11<sup>th</sup> International Seminar on Disaster (March 26 – 29, 2014)

### Community Service in Post Disaster Area - Children House Griya Lare Utami - With program of Early Childhood Education Program and Women Empowerment




### Challenges in Disaster Nursing Education

- No national standardized curriculum for disaster nursing
- Some institutions include disaster nursing education as compulsory subject, others as optional subject
- Contents and methods of teaching are vary among institutions

Thank you very much


Bantul district (after Yogyakarta earthquake 2006)  
from a certain altitude...



**The International Symposium on  
 Disaster Nursing Education**

Symposium on the Present Situation and Challenges  
 on Disaster Nursing Education

Assist.Prof.Dr. Varunyupa Roykulchareon



**Issues on Disaster Nursing**

“Because of their diverse experience, education, and practice settings, nurses are uniquely qualified first leaders, care givers, and receivers in any large scale public health emergency. However, most of nurses feel inadequately prepared to function effectively in these types of situations”

Marguerite and Lynn, 2008



**Overview**

Disaster	Nurses	Disaster management
<ul style="list-style-type: none"> <li>Each country has to be prepared for responding</li> </ul>	<ul style="list-style-type: none"> <li>are important health personnel, who takes parts in several roles and in various phase of the disaster</li> </ul>	<ul style="list-style-type: none"> <li>Preparation of nurses with appropriate competencies is significant</li> </ul>



**ICN framework of disaster nursing competencies**


- Prevention phase/mitigation phase
- Preparedness phase
- Response phase
- Recovery/rehabilitation phase



**Context: Disaster and Nurses**

Thailand  
 Nursing roles

- were not clear in helping disaster and used their own experiences in helping disaster victims
- had difficulties working in disaster situations
- were victims themselves



**Context: Disaster and Nursing Curriculum**

- The content of disaster nursing were not enough for working in disaster situations
- Special training course and graduate curriculum related to disaster nursing and disaster management were not clearly operated
- Thai nurses still need competency preparation in disaster management and disaster nursing in education institutes, and health service institutes



## Disaster Nursing Education

the implementation of disaster nursing education in undergraduate course, the graduate program, and continuing education for nurses is necessary.

develop further knowledge and clarify future challenges related to disasters and contribute to the preparedness of people and communities

## Disaster Nursing

disaster nursing

disaster management

the related disaster organization

roles of nurses for caring disaster victims in each phase

basic skill for disaster management

## Method of teaching



## Content

- Concept disaster nursing and disaster management
- Disaster management



## Content (continued)

- Roles of nurses
- Site visit Disaster Management and helping disaster victims
- Transferring victims and related organization

## Project Agreement between TRC and IFRC

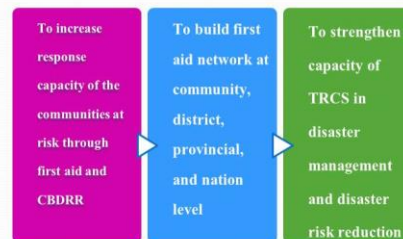
Thailand was

• one of 13 countries affected by the 2004 Indonesian Tsunami

• received emergency relief during the disaster as well as support for recovery programs

• At the closure of the Tsunami Operations a residual of 29.5 million CHF remained and was made available to the 13 affected countries through Emergency Appeals and/or Annual Plans; support to disaster relief through DREF; or Tsunami Legacy Programs

## TRC's Tsunami Residual proposal consists 22 sub-projects and its key objectives include



Note: The destructive Tsunami on 26 December 2004

**At that time: Holistic Community-Based Healthcare Capacity Building Project**

- Focus on community development strategies, community health drives, social networks, community uniting and strengthen activities as well as promotion of individual's physical and mental health.
- Originally conceived by the TRCS with TRCN as the implementing agency.
- Funded from by the IFRC and the American Red Cross
- To improve the health of the people of the tsunami-affected communities

**Right now: Funding Projects**

**Well-prepared community for Floods response**

**Follow up on the communities implemented by TRCN funded by Tsunami Funds 2004**

- Funded by IFRC (Thailand Tsunami Residual Fund Project)

**Funding Projects (continued)**

**The Health Capacity Development in Children for Disaster Preparedness**

- Funded by Chinese Red Cross

**Flood Disaster Preparedness Volunteer Network for University and College Level Students**

- Funded by IFRC (Post Emergency/Preparedness Operation)

**The Health Capacity Development in Children for Disaster Preparedness (Project)**

- Participation of Nursing Students



**Thank you for your attention**

วิทยาลัยพยาบาลสภากาชาดไทย  
The Thai Red Cross College of Nursing



**Mariko Ohara**  
**Japanese Red Cross College of Nursing**

**Current situation and findings of disaster nursing education in Japan**  
 ~Progress of disaster nursing education

**Mariko Ohara R.N., Ph.D.**  
 International Nursing & Disaster Nursing Field  
 The Japanese Red Cross College of Nursing

**Nursing in Japan**

- Number of nurses: about 877,000
- Ng. Colleges about 200/ Total number of
- Public and Private Univs. and colleges: 200
- Diploma Course in Nursing School 800
- Impact of College of Nursing in university education
- Based on social needs, linkage with others and role as professional are increased.
- Establishment of the World Academy of Nursing Science
- Lead disaster nursing of the world, information of new activities

**JSDN**  
 What learned from East Japan great Earthquake in 2011

**Great damage**

The fact what people's life be saved by people

**Out of assumption**

**Explosion of Nuclear Power Plant**

**Recognized fear for natural disaster & manmade disaster again!**

**From now on Assignment of Disaster Nursing**

1. Collaborative works with nursing experts of other organization and academic societies.
2. Information exchange with other teams and make linkage more.
3. To Work on health & living problem which we founded through each activity on disaster cycle.
4. To Bring up leader with coordination and practice ability of the nursing.



**Development of Disaster Nursing in Japan**

1. Established Japan Society of Disaster Nursing in 1998 Leading to Great Hanshin-Awaji in 1995
2. Started Disaster Nursing Seminar for general nurses by Japan Nursing Association since 2000, also started to dispatch Disaster Support Nurses to disaster site since 2004 as system
3. Started to build in Disaster Nursing to Basic Nursing Education Curriculum as system from 2009
4. Established World Society of Disaster Nursing in 2010 lead to Japan Society of Disaster Nursing
5. Going on establishment of Disaster Nursing Field Certified Nursing Specialist (CNS) by Japan Association of Nursing Programs in Universities(JANPU) aiming to establish in 2013

**Structure of Disaster Nursing Education in JRCCN**

- Basic Disaster Nursing Education since 2005
- Master Degree of Disaster Nursing Science(MA.) researcher's course since 2008 going on CNS course since 2013
- Doctor Degree of Disaster Nursing Science(PhD.) since 2013
- Doctor Degree of Global Leader Disaster Nursing going on since 2014

# Curriculum of under graduate & graduate program in JRCCN

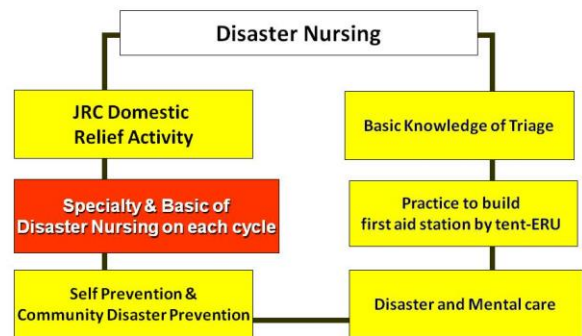
## Main Curriculum Structure of Basic Education in JRCCN



Figure 1: Overall Disaster Nursing Education Program (since 2005)

Required	4th Year First Semester	Disaster Nursing Theory II	15	1
Elective	3rd Year Second Semester	Red Cross disaster nursing activity theory III (Nursing in evacuation center & temporary house, disaster preparedness to make prevention & mitigation)	30	1
Elective	3rd Year First Semester	Red Cross disaster nursing activity II (Disaster and mental health care)	30	1
Elective	2nd Year Second Semester	Red Cross disaster nursing activity I (the nurse's role in acute stage of disaster)	30	1
Required	1st Year Second Semester	Disaster Nursing Theory I	15	1

Framework of Disaster Nursing Education



## Method & Content of Practice in Red Cross Nursing Activity I "Nursing in Disaster Emergencies"

Desk Simulation

Pictorial triage of disaster scene, Cooperation between other professions by using ETS

Technical Practice

Use of disaster relief equipment (tent, stretcher, wireless telephone, first-aid treatment)

Physical Assessment Practice

Response for injured patient using advanced functional simulator  
Triage practice by make-up patient, Triage & fill up triage tag

Full scale exercise

Playacting of make-up patient, practice of full scale of relief activities

## Transport Triage



Structure of Relief Team on Air Crash Site



Desk Simulation

## Result 1.

The comparison of self evaluation conducted before and after the comprehensive practical training.

Selection of a few items out of 22 self evaluation items, which made a large difference. (n=43)

Territory	Appraisal items	Before	After
Technical skill	Handling the Triage Tag	1.98	4.14*
	Handling the relief equipment	1.81	4.02*
	Establishment of First Aid station	1.40	4.19*
	Arrangement of the equipment	1.47	3.48*
Capacity for achievement	Collaboration activity with the team member	2.33	4.00*
	Conduct conversion of own task	1.93	3.81*
	Roll play exercise with make-up patient	2.81	4.33*

## Participation to disaster drill at community

The necessity to make linkage to community people



Training of tracing

Japanese Red Cross first-aid



Training of evaluation center to set up accommodation



**Program for the exchange study for Foreign nurses learning of disaster nursing**



**In Temporary House**



**Students have learned on communication to victim in disaster site**

**Essential Points on Disaster Nursing Basic Education**

1. Care activity and Research to make linkage to Health & Life problem based on disaster victims
2. The need to educate the role of Disaster Nursing based on Disaster Cycle and Active Site, also characteristics of victims, especially focus on vulnerable group

**The characteristics of program to bring up advanced disaster nursing resource person in CNS master course**

- Using the network of the Red Cross at home and abroad
- The field work activities of disaster nursing each cycle
  - 1) Training of medium and long term support for victim
  - 2) To collaborate community people and hospital



**6 abilities as CNS on Disaster Nursing**

- Advanced nursing practice
- Consultation
- Coordination & Collaboration
- Research
- Education
- Ethical Consideration

**Practice**



In Bangladesh

Middle term support for the victim

To facilitate to nursing students



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