The Great East Japan Earthquake
JNA activities
and
Preparedness for Future

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May 20\textsuperscript{th}, 2013
ICN 25\textsuperscript{th} Quadrennial Congress
Outline of the presentation

1. Disaster preparedness before the Great East Japan Earthquake
2. JNA’s activities for 2 years since the Earthquake
3. Preparations for the future
1. Disaster preparedness before the Great East Japan Earthquake
Japan: A land with frequent disasters

Due to geographically, topographically and meteorological conditions, Japan has many natural disasters, such as typhoons, heavy rains and earthquakes.

Physically felt earthquake in Japan January – December 2012

3139

Source: Japan Meteorological Agency monthly report of earthquake and volcano, December 2012.
17 January 1995
the Great Hanshin-Awaji Earthquake

Source: City of Kobe, Hyogo Prefecture
JNA Relief Network System in Times of Disasters

The Government

JNA

Prefectural Nursing Association

Coordination and Dispatch of the Disaster Relief Nurses

Communicating the situation and support request

The Nursing Association in the affected prefecture

Local governments

Health care facilities etc

Disaster Relief Nurses

situation report/support request
2. JNA’s activities for 2 years since The Great East Japan Earthquake
The Great East Japan Earthquake

Time and date: 11 March 2011, 14:46 (local time)
Scale: Moment Magnitude 9.0
Death toll: 15,880
The missing: 2,694 (as of 27 February 2013)

Source: City of Miyako, Iwate Prefecture
The tsunami had impact on all over the world

Source: National Oceanic and Atmospheric Administration Center for Tsunami research
The tsunami debris crossed the Pacific Ocean and reached North America, 8,800km away from Japan.

Source: Oregon.gov Oregon parks and recreation department
Nuclear Disaster

Tokyo

Fukushima
Disaster of Fukushima Daiichi Nuclear Power Plant

The number of evacuees from the area of evacuation orders about 109,000

Source: Reconstruction Agency as of 20 February 2013
JNA’s Activities

March 11, 2011 - May 2013

Initial response

- Dispatch disaster relief nurse
- Fund-raising for disaster relief
- Survey

Support for the recovery of nursing function

Medium-term

- Refreshment support
- Mental health care for nurses
- Discussion sessions with nurse managers
- Support to secure nurses
- Technical support
- Support for local reconstruction activities

- Reconstruction & strengthening home care service
- Supporting public health nurses at nuclear evacuation area

Long-term

Policy recommendation
JNA’s Activities

Initial Response

Dispatch Disaster relief nurse

Fund-raising for disaster relief

Survey

Medium-term

Support for the recovery of nursing function

Refreshment Support

Mental health care for nurses

Discussion session with nurse managers

Support to secure nurses

Technical support

Long-term

Support for local reconstruction activities

Reconstruction & strengthening home care service

Supporting public health nurses at nuclear evacuation area

Policy Recommendation
Dispatch of Disaster Relief Nurses

Reducing physical & mental burden of affected nurses by taking over their work at the health facilities.

Prevention activities against severe illness and infection outbreak at the evacuation centers for 24-hour

Maintain ADL and precautions care of complications of the elderly
Survey of the condition of the members and Recovery of nursing function

Survey of the condition of members

Urgency need to reconstruct health care delivery system

Allocation of donation money aiming to recover nursing function
JNA’s Activities

Initial response

Medium-term

- Dispatch disaster relief nurse
- Fund-raising for disaster relief
- Survey
- Support for the recovery of nursing function

Long-term

- Refreshment support
- Mental health care for nurses
- Discussion sessions with nurse managers
- Support to secure nurse

Support for local reconstruction activities
- Reconstruction & strengthening home care service
- Supporting public health nurses at nuclear evacuation area

Policy Recommendation
Refreshment support for affected nurses

JNA supported 119 nurses to attend the JNA’s professional nursing assembly and the social gathering

98% of the participants felt much refreshed

- Took a leave from their daily life
- Catharsis: able to talk about the disaster
- Solidarity: colleagues are with us

Medium-term
Securing nurses

The number of evacuees from the area of evacuation order
about 109,000
As of 20 February 2013

The number of hospital nurses in the area around the nuclear power plant

<table>
<thead>
<tr>
<th>Time of Measurement</th>
<th>Number of Nurses</th>
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<tbody>
<tr>
<td>Before the disaster (1 March 2011)</td>
<td>1,188</td>
</tr>
<tr>
<td>1.5-year after the disaster (1 September 2012)</td>
<td>738</td>
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</tbody>
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Drop by about 40%

source: Fukushima Prefecture
Support to secure nurses

- Utilize current free job-placement website
- JNA public relation newsletter
- Matching job seekers with job offers
Technical support

objectives
- Improve professional practice skills
- Develop a feeling of self-efficacy
- Prevent turn-over

Hospital
- Support by JNA nurses specialized in infection control

Community
- Support by Public health nurses
JNA's Activities

Initial Response
- Dispatch disaster relief nurse
- Fund-raising for disaster relief
- Survey

Medium-term
- Support for the recovery of nursing function
- Refreshment Support
- Mental health care for nurses
- Discussion session with nurse managers
- Support to secure nurses
- Technical support

Long-term
- Support for local reconstruction activities
  - Reconstruction & strengthening home care service
  - Supporting public health nurses at nuclear evacuation area

Policy Recommendation
Support for local reconstruction activities

Support for financial aspect of local activities
Reconstruction and strengthening home care service

information for visiting nursing stations to be well established in the community
Support for activities of public health nurses in the nuclear evacuation area

Only the mother and children evacuate to avoid the effect of radiation

- PTSD
- depression
- anxiety disorder
- obesity
- alcohol-related problems
- unemployment
- homebound status

Health issues facing population in the affected areas
3. Preparations for the future
Future of the disaster relief activities

1. Program on Disaster Relief Nursing
2. Revision of the dispatch system
3. Increase of the budget
Considering how we will respond when JNA is struck by a huge disaster

Probability of ground motions equal to or larger than seismic intensity 6 Lower, occurring within 30 years

Source: Earthquake Research Committee  Probabilistic Seismic hazard map 2012
Thank you!