Secondary Risk Reduction Strategies for the Mid-and-Long Term Consequences
-From Nursing Perspectives in Japan

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Disasters for the Last Three Decades (Japan)

- 1971  Typhoons No. 23, 25 & 26
- 1972  Rainstorms in June & July
- 1973  Earthquake off the coast of Nemuro Peninsula
- 1974  Rainstorms and Typhoon No. 8 /Earthquake off the coast of Izu Peninsula
- 1975  Rainstorms and Typhoons No. 5 & 6
- 1976  Rainstorms and Typhoon No. 17/52 Heavy snowfall
- 1978  Earthquake near the coast of Izu Oshima Island/Miyagi Offshore Earthquake
- 1979  Typhoon No. 20
- 1980  56 Heavy snowfall
- 1982  Nagasaki Rainstorm
- 1983  Nihonkai-Chubu Earthquake/Shimane Rainstorm/59 Heavy snowfall
- 1984  Western Nagano Earthquake
- 1990  Eruption of Fugendake of Unzen Volcano
- 1993  Kushiro Offshore Earthquake/Hokkaido Offshore Earthquake and Tsunami
- 1994  Sanriku Offshore Earthquake
- 1995  The Great Hanshin-Awaji Earthquake
- 1998  Flood disasters in Kanto and Tohoku regions/Typhoon disasters in Kinki and Chubu regions
- 1999  Soil avalanche at Hiroshima/Criticality accident at JCO plant at Tokai
- 2000  Tokai Rainstorm/Eruption of Mt. Usu/Eruption of Mt. Oyama on Miyakejima Island
- 2001  Typhoon disaster in Okinawa
- 2002  Flood in Gifu
- 2003  Iwate Earthquake
- 2004  10 Typhoons hit the main island
- 2005  Niigata Chuetsu Earthquake
At 5:46 on January 17 in 1995
The Great Hanshin-Awaji Earthquake

Intensity: Magnitude 7.2
(7 on the Japanese scale)
Depth of epicenter: 16 km
Death toll: 6,432
Injured: 43,792
Affected houses: 512,882
Disaster Nursing Organizations

- Japanese Nursing Association
- Japan Society of Disaster Nursing
- Japanese Red Cross Society
- Government agencies
- NGOs and NPOs such as AMDA
- Nursing colleges such as University of Hyogo
- Others
## Primary Risk on Health
- casualties, injury or threat to life
- crisis reaction such as panic, high anxiety, fear
- lack or shortage of drugs or treatment regime
- no access to medical facilities or professionals
- lack of clean air, water or food

## Secondary Risk on Health
- worsen the chronic illness
- mental health problems including alcoholism
- infectious diseases arisen
- malnutrition
- food poisoning
- deterioration of ADL
- disability due to injuries
Phases of Disaster Nursing

- Preparedness Phase
- Initial Phase
- Mid-term Phase
- Long-term Phase
1. Initial Response Phase

1) Lifesaving and emergency care
2) Maintenance of environmental hygiene
3) Remains management
4) Prevention of spread of infectious diseases
5) Mental health care
6) Volunteer coordination (recruitment and allocation)
7) Support to the affected hospitals and clinics
Provision of Well-equipped Disaster Shelters

Air conditioning, lighting, noise control, toilets, hand washing, waste disposal, privacy protection, cleaning, etc.
“Normal reactions to an abnormal situation”

Traumatic experiences are the norm and not abnormal reactions for people in extremely dangerous situations such as large-scale disasters.

PTSR  
Post Traumatic Stress Response

PTSD  
Post Traumatic Stress Disorder

“Psycho educational nursing interventions”

A group therapy where people can discuss freely in a safe environment
Provision of Nursing Volunteers

Nursing Volunteer Coordination Center

- Assignment and replacement of onsite nursing staff at affected areas
- Emotional support to affected people

To work as staff to support affected hospitals and clinics
Mid-term Phase

1) Secondary disaster prevention
2) Assistance to the vulnerable affected by a disaster
3) Health care for residents in temporary housing
4) Development of rapport
5) Mental health care
Health Care for Residents in Temporary Housing

Public Health Center

Support

Temporary Housing

Support

Local Nursing Association
Overall adjustment, secure provision of personnel, collaboration with other organizations in Hyogo Prefecture, and Japanese Nursing Association

Schools of Nursing or others
Establishment of main office, Integration of activities, Elicitation of needs and assistance

Japanese Nursing Association

Other Prefecture Nursing Associations

support  collaboration

support  collaboration
Building Rapport among People

Health consultation provided at Fureai Center (encounter room)

The activity helped the affected people, who are likely to be isolated, feel protected and supported, and also helped improve their self-care ability.
Long-term Phase

1) Relocation support
2) Community building
3) Mental health care
Health Advisors

- Volunteer nurses engaged in regional health care activities under PHN and sent by Health advisors: Qualified nurses who were ex-nurses.
- Number of nurses working as health advisors: about 170
- They were in charge of caring for the elderly, the disabled, pregnant women, children, etc.
Community Building

Promoting interchange among the affected people to mitigate the feeling of isolation and deepen friendship

Ex. Community parties, health consulting

“Memorial Day”
The occasion also served as an opportunity to heal from the sorrow.
1) Disaster prevention training for residents
2) Establishing a medical network
3) Establishing a network among nurses
4) Knowledge accumulation and skill development
5) Development of disaster nursing education
Disaster Prevention Training

What is a “Town Healthcare Room”?  
Just like a school health room, nurses are stationed so that people can talk to them about their concerns and worries.

Nurses are encouraged to be involved in daily community activities as a health advisor.
Nurses Network for Disaster
-International collaboration -

Activities to establish a network

August 29-30, 2002

The First Asian Forum on Disaster Nursing

Participating countries:
China
Indonesia
Korea
Mongolia
Taiwan
Thailand
Japan
Awaji Declaration

We, the participants of the International Meeting on Disaster Nursing Network in Asia: Focusing on Disaster Nursing Education, August 29 and 30, 2002, call for the importance of the development of disaster nursing and building the network among colleagues in the world and pledge to prepare for the disaster which may occur in Asian region.

Aug.30.2002
International Support Activities

- Earthquake in Turkey, Aug. 17, 1999
  Donations, site tour and conference, two nurses dispatched

- Earthquake in Taiwan, Sept. 21, 1999
  Donations, inviting the nursing association to Japan, workshops

- Earthquake in India, Jan. 26, 2001
  Donations, workshops

- Earthquake in Iran, Dec. 26, 2003
  Donations, site tour and identification of required assistance, workshops

- Fire disaster in Paraguay, Aug. 3, 2004
  Supply of medical materials

- Sumatra Earthquake and Indian Ocean Tsunami, Dec. 26, 2004
  Donations, preparations for dispatching investigation teams
Earthquake in Turkey

Aug. 17, 1999

Intensity: Magnitude 7.8
Deaths: Over 10,000 (estimated)

Donations: ¥26 million
Two persons dispatched from Japan Society of Disaster Nursing and Japanese Nursing Association to assess the situation
Earthquake in Taiwan

Intensity: Magnitude 7.6

Deaths: Over 400

Donations: Approx. ¥26 million
Joint workshop with Taiwan Nursing Association. Five tutors dispatched to Taiwan from Japan Society of Disaster Nursing and Japanese Nursing Association.
Earthquake Disaster in India Jan. 26, 2001

Intensity: Magnitude 7.9
Deaths: Over 20,000

Donations: Approx. ¥6.6 million
Japanese Nursing Association dispatched tutors to the workshop organized by the Indian Nursing Association.
Fire Disaster in Paraguay

Aug. 3, 2004

Deaths: Over 364

Japan Nursing Association provided assistance to procure medical materials and published expressions of sympathy for the victims and rescue nurses in newspapers.
Earthquake in Iran  Dec. 26, 2003

Intensity: Magnitude 6.5
Deaths: Approx. 43,200

Donations: Approx. ¥25 million
Three persons dispatched to investigate the site from Japan Society of Disaster Nursing, Japanese Nursing Association and the COE Program of University of Hyogo
Sumatra Earthquake/Indian Ocean Tsunami

- Dec. 26, 2004
- Magnitude 9.0
- Death toll: Over 150,000 (as of Jan. 7, 2005)
Future Issues in Disaster Nursing

- Training of nurses who are prepared for and can respond to disaster
- Establishment and development of disaster nursing as a discipline
- Enlargement of organizational bases and their coordination
- Development of information bases for disaster nursing
- International networking