

Secondary Risk Reduction Strategies for the Mid-and-Long Term Consequences

-From Nursing Perspectives in Japan



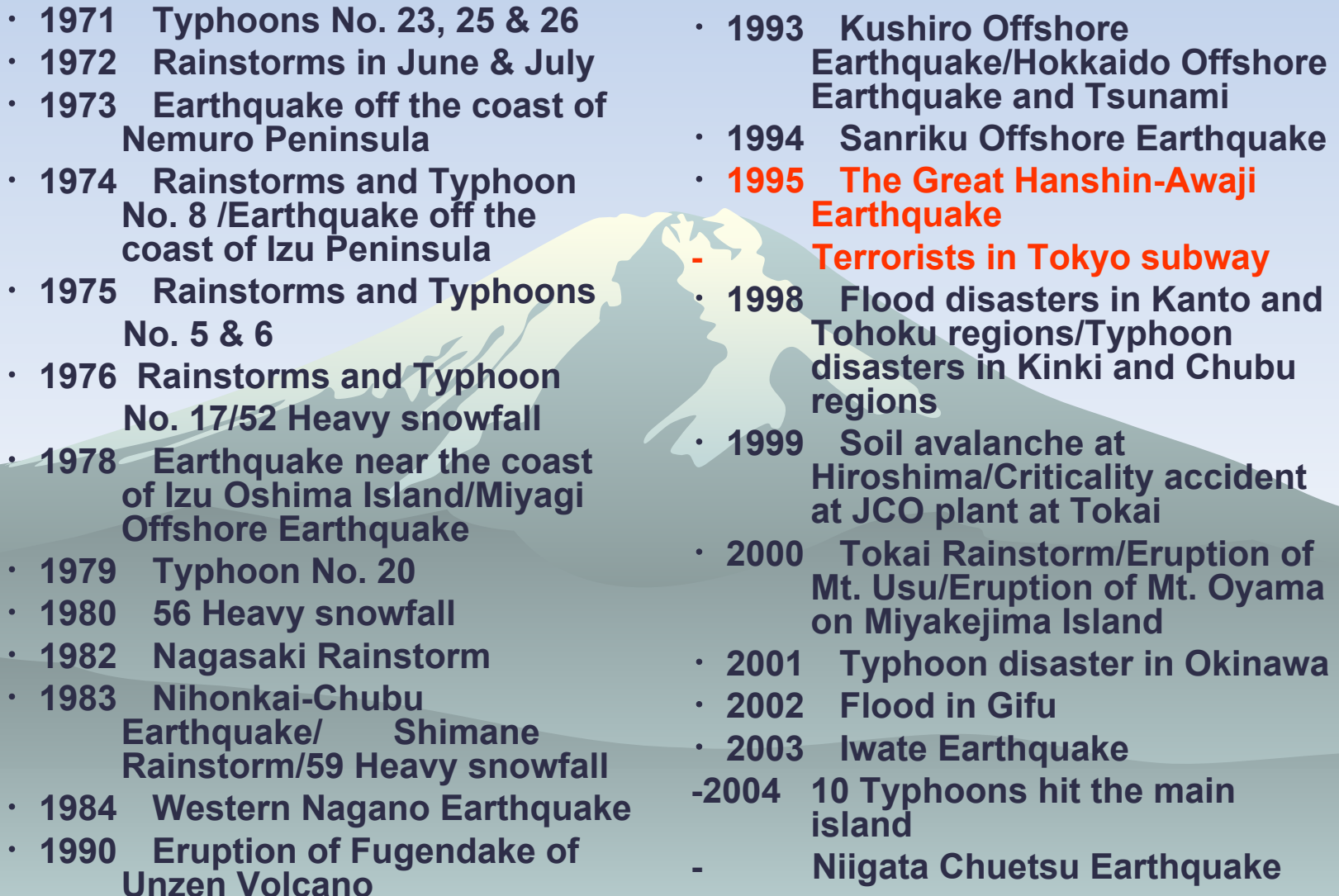
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President, Japanese Nursing Association

President, Japan Society of Disaster Nursing

Vice President, University of Hyogo

Disasters for the Last Three Decades (Japan)

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- 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**
 - **Terrorists in Tokyo subway**
 - 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
 - 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

Disaster

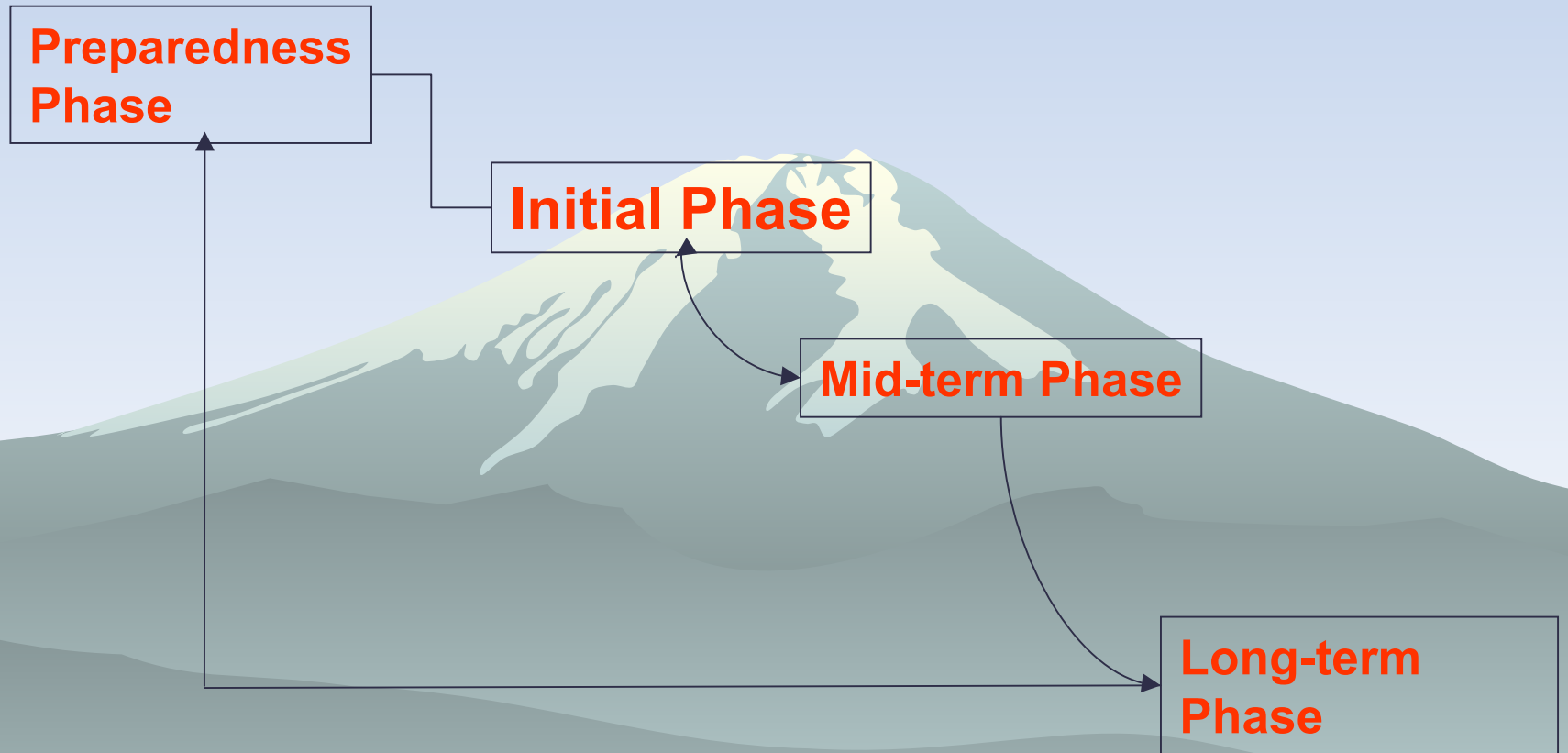
◆ Primary Risk on Health

- 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

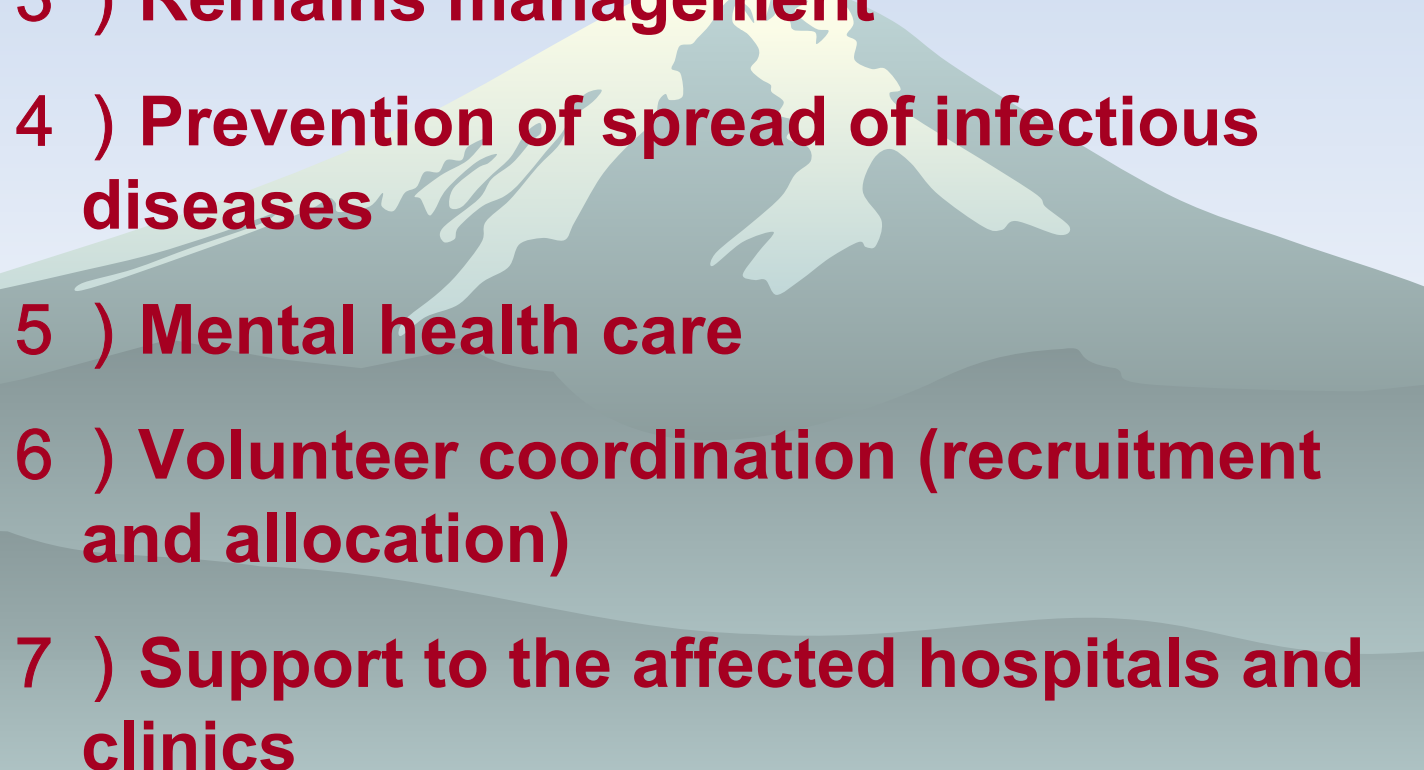
◆ Secondary Risk on Health

- worsen the chronic illness
- mental health problems including alcoholism
- infectious diseases arisen
- mal-nutrition
- food poisoning
- deterioration of ADL
- disability due to injuries

Phases of Disaster Nursing



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**
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Provision of Well-equipped Disaster Shelters

Air conditioning, lighting, noise control, toilets, hand washing, waste disposal, privacy protection, cleaning, etc.



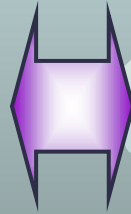
● Mental Care

“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

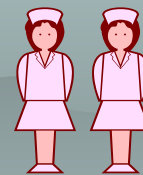
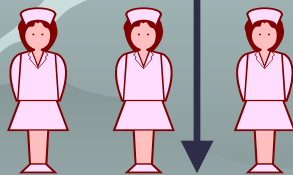
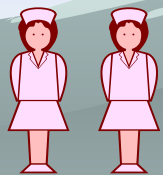
Post Traumatic Stress
Disorder

“Psycho educational nursing interventions”

A group therapy where people can discuss freely in a safe environment

● Provision of Nursing Volunteers

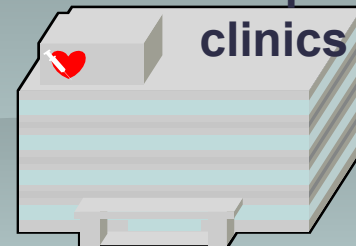
Nursing Volunteer Coordination Center



To work as staff
to support
affected
hospitals and
clinics

Assignment and replacement of onsite
nursing staff at affected areas

Emotional support to affected people



● **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

Temporary Housing

Support

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

collaboration

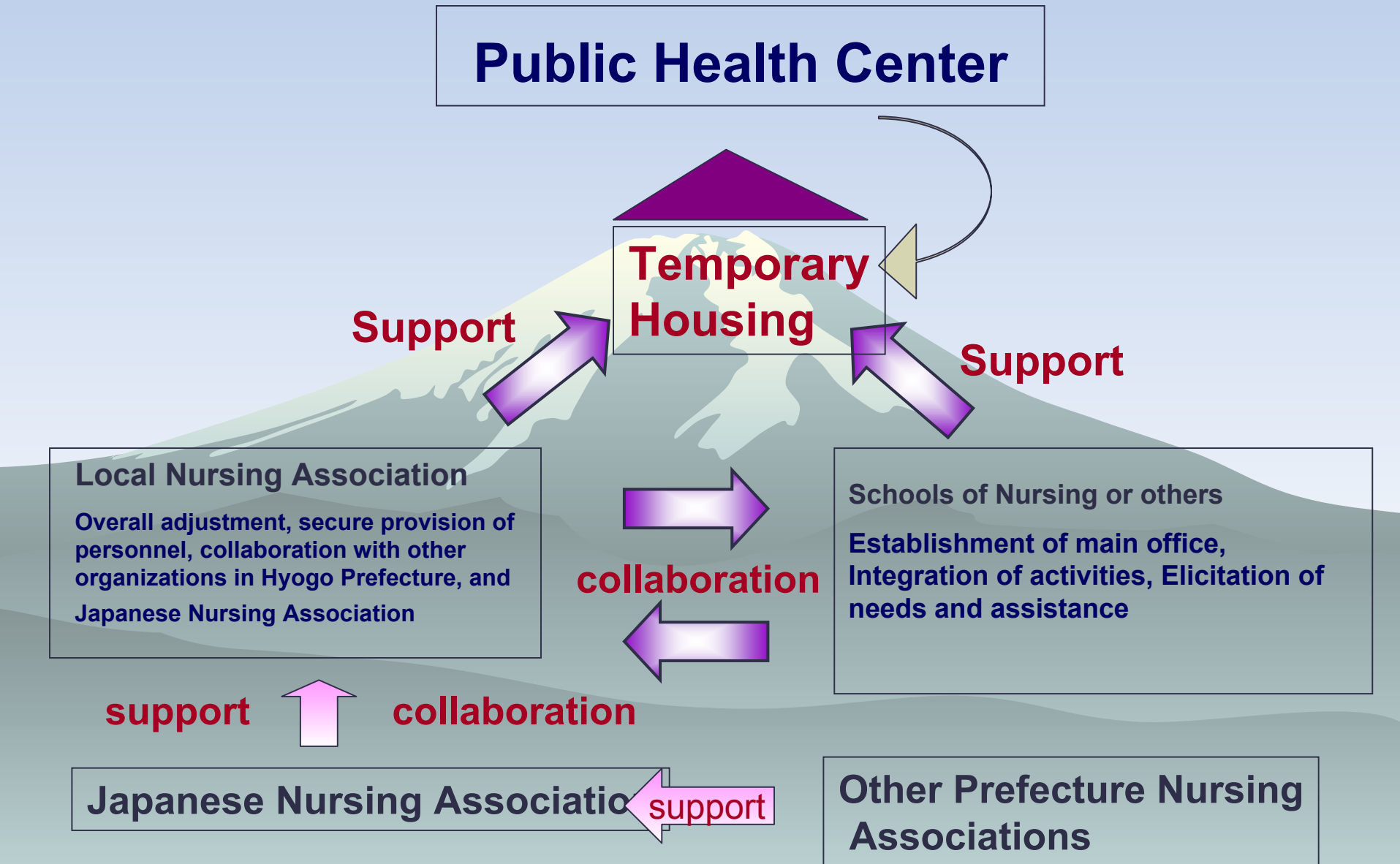
support

collaboration

Japanese Nursing Association

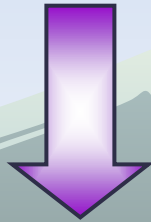
support

Other Prefecture Nursing Associations



● 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

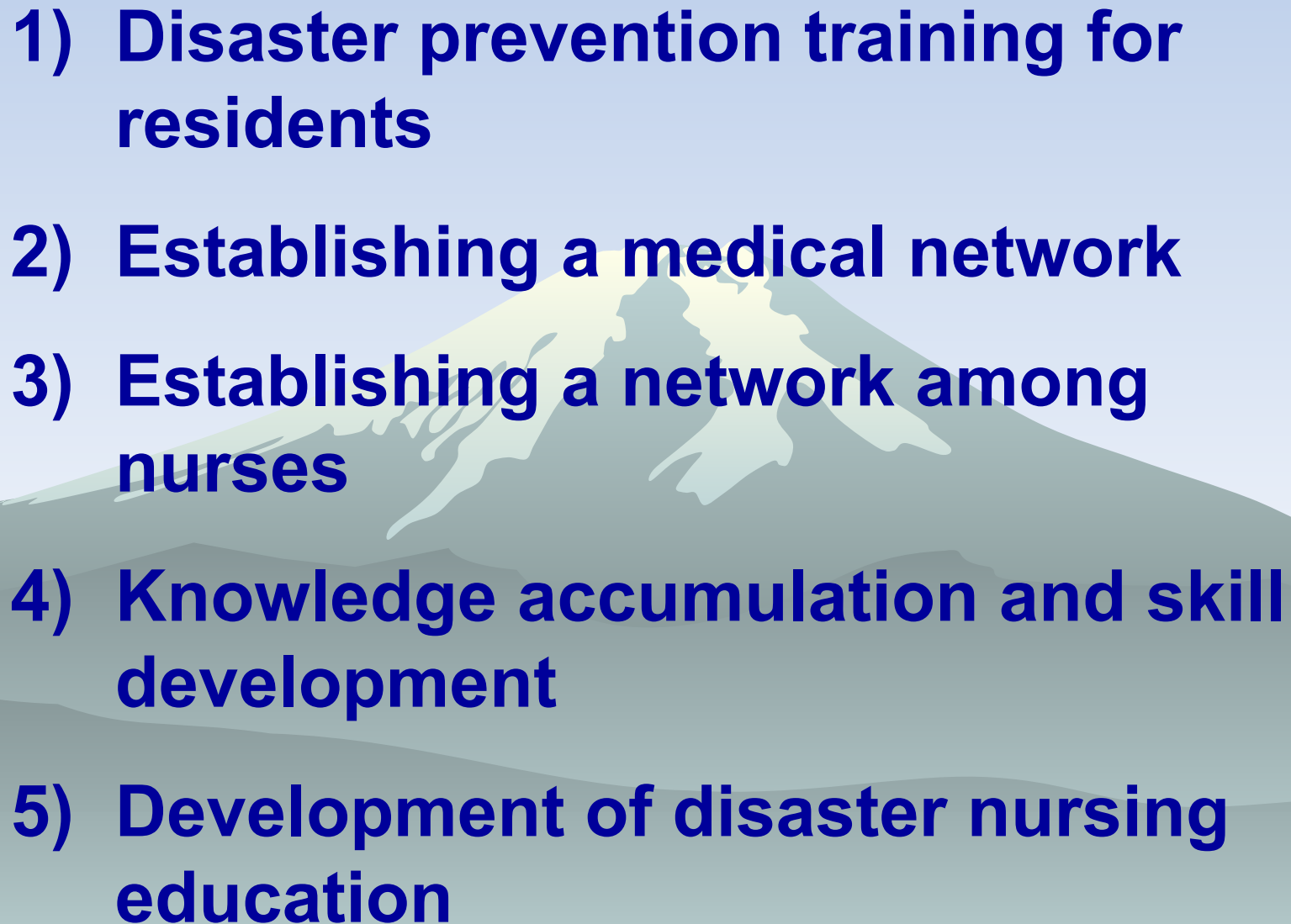
**Promoting interchange among the affected people
to mitigate the feeling of isolation and deepen
friendship**

Ex. Community parties, health consulting

“Memorial Day”

**The occasion also served as an opportunity to heal
from the sorrow.**

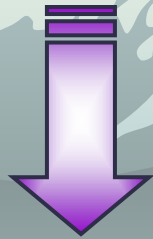
Preparedness Phase

- 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
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● 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

and

prepare for the

**disaster which may occur
in Asian re**

Aug.30.2



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

Sep. 21, 1999



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,

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



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

Intensity: Magnitude 6.5

Deaths: Approx. 43,200



Sumatra Earthquake/Indian Ocean Tsunami



- ◆ Dec. 26, 2004
- ◆ Magnitude 9.0
- ◆ Death toll: Over 150,000 (as of Jan. 7, 2005)



The background features a stylized illustration of Mount Fuji, a snow-capped mountain with a yellowish-white peak, set against a light blue sky. Below the mountain are several layers of greyish-blue hills, creating a sense of depth. The overall aesthetic is clean and modern.

Nurses in Japan Support Nurses in Other Countries

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**