

Disaster Nursing in a Ubiquitous Society

**Nursing care provider guidance for elderly  
in temporary housing following disasters**

- Care needs and coping methods -

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# Nursing care provider guidance for elderly in temporary housing following disasters

## —Care needs and coping methods—

It has been suggested that the health of elderly people and their ability to cope on a day-to-day basis suffer in disaster situations: their vulnerability in various aspects of life is widely known.

To determine the care needs of elderly victims of disaster, we reviewed the research, surveys and literature published on disaster situations; the care needs and coping methods required by elderly residents living in temporary housing are summarized in this booklet.

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## “House Bound” and “Solitary death”

Elderly victims of disaster who have lost their homes, family/relatives and friends are often given priority for transfer to temporary housing because of health management issues. However, elderly evacuees often have problems adapting to new housing environments, which may bear little resemblance to their former homes and which may be far away from relatives, and there are risks of a suicide or solitary death. Elderly residents who are housebound, going out only to go shopping or visit hospitals etc, and who are reluctant to communicate with others, are most at risk.

To determine the risks, it is important to evaluate the living conditions of elderly residents, including participation in community activities, and determine whether there is sufficient social support.

### Assessment

1. Observe and evaluate elderly residents (elderly couples, single elderly residents, particularly single elderly males) on a regular basis, noting their physical and mental states ADL, IADL
2. Evaluate the frequency of communication with relatives, friends and neighbors



## Coping methods

1. Elderly residents should receive continuous regular visits, e.g. from health care practitioners and volunteers
2. Contact should be made with administrative bodies, welfare institutions and long-term care institutions where necessary, and any necessary changes made
3. Events should be planned that allow the participation of all residents of temporary housing (such as exercise sessions, lunch/dinner parties, tea parties, board game (igo, syogi) parties and seasonal events) for fostering closer relationships among residents
4. Elderly residents of temporary housing should be given roles (such as caring for flowers/plants and inclusion in garbage rotas) to ensure their participation in house activities



## Problems around living in temporary housing

In temporary housing life, physical function and activity tend to decrease. Because there may be many extremely elderly residents, day-to-day support may be necessary.

### Factors reducing physical function and activity in elderly residents

- \* Decreased physical strength and insomnia associated with temporary housing life
- \* Insufficient exercise and a tendency to become house bound
- \* Failure to seek treatment for unconditioned dentures or lower back/knee pain

Meals in temporary housing can also be a source of problems; some elderly residents are not satisfied with the meals provided, or fail to pay attention to their diet. Single elderly residents are particularly at risk of failing to eat regular meals. In addition, the design of standard prefabricated housing units may create problems for elderly residents because they are not barrier-free. They may also be inconvenient for shopping and transportation creating further problems. Thus, the environment of temporary housing for the elderly is often inappropriate.

Support is necessary to prevent a decrease in the ADL of elderly residents.

## Assessment

1. State of living, ADL, IADL
2. Amount/frequency of meals, nutritional state
3. Temporary housing environment (difference in levels of living area, presence/absence of handrails, height of bathtub, state of paving around the housing, state of transportation around the housing, etc.)
4. Need for shopping and transportation



## Coping methods

1. Evaluate the equipment and surrounding environment of temporary housing
  - 1) Evaluate places that are considered to be inconvenient for elderly residents
  - 2) Improve the housing and surrounding environment in cooperation with administrative bodies, long-term care institutions, welfare facilities and volunteer groups
- \* Eliminate differences in levels, and set up non-slip stairs, lever-type faucets and large handles
- \* Set up emergency alarm systems and safety confirmation systems
- \* Improve temporary passages (such as plain pavements)
- \* Put up signs that are easy for elderly residents to see to prevent them from becoming lost



2. Increase of opportunities for going out
  - 1) Invite residents to health consultation meetings, lunch/dinner parties and tea parties
  - 2) Implement and continue exercise
  
3. Provide dietary support
  - 1) Provide dietary advice/guidance
  - 2) Encourage residents to participate in cooking classes especially single elderly males
  - 3) Consider the use of dietary support from catering services, home helpers, volunteers and neighbors, when elderly residents cannot cook for themselves
  
4. Recruit and arrange shopping and driving volunteers
  
5. Make arrangements to obtain necessary services, e.g. cooperate with associated institutions



## Problems associated with health management

Prolonged life in temporary housing causes many health problems including worsening of chronic diseases and development of new diseases.

Self-management of health can cause problems in the elderly who may: demonstrate a lack of concern about their own health; fail to get medical check-ups for a long period of time after the disaster; and fail to administer medication correctly.

Therefore the health of each elderly resident should be regularly evaluated, and support for the prevention of aggravation of conditions should be provided for both elderly residents with health problems and those without apparent health concerns.



### Coping methods

#### 1. Identify elderly residents with health problems

Find the elderly residents in need of support, those with health problems and those who may have health problems in the future by surveying all residents of temporary housing



## 2. Home-visits by health consultants

- 1) Set up individual home-visits to elderly residents by public healthcare nurses and nursing volunteers
- \* The same members should visit each area regularly whenever possible
- 2) Share health information using self-management sheets on health, and stress the importance of self-care in elderly residents
- 3) Consult on not only health problems but also life problems
- 4) Provide information on elderly residents with health problems to administrative bodies, medical institutions, welfare facilities and volunteer groups, and request these institutions cooperate with the care of residents

## 3. Plan and implement health consultation meetings

- 1) Post notices on walls and distribute fliers
- 2) Provide information for health management through health consultations and medication consultations
- 3) Provide health guidance including information on exercise, nutritional guidance and cooking classes



4. Set up a system allowing continuous monitoring of elderly residents
  - 1) Promote home-visits by volunteers
  - 2) Inform volunteers about points to observe during home-visits to enable the early discovery of problems
  - 3) Construct a system so that when there is something wrong with elderly residents, information can be easily passed on to health specialists, such as nursing volunteers

**Examples of observation points during home-visits:**

- \* Time taken until elderly residents answer the door
- \* Vitality, strength of voice
- \* State of the house, i.e. is it tidy
- \* State of the kitchen and tableware. i.e. is it being used

5. Evaluate medical needs and provide continuous medical care
  - 1) Confirm whether the elderly resident is having regular medical check ups and if not request them
  - 2) Provide information about nearby medical facilities
  - 3) Provide support for residents visiting medical facilities, where necessary
    - Arrange for volunteers to drive and a means of transportation for elderly residents who hope to visit medical institutions situated a long distance away
  - 4) After medical check ups follow up on medication provided



## Mental health

For elderly people, transferring from a shelter to temporary housing and prolonged evacuation may induce stress-associated symptoms such as insomnia, shoulder stiffness, malaise and headache, and aggravate chronic diseases. In addition, elderly residents tend to lose hope for a new life, feeling left behind by others or finding no purpose or no pleasure in daily life.

Some time after the disaster, and following relocation to a new home, some elderly residents develop prodromal symptoms of PTSD (post-traumatic stress dis

order) or PTSD itself, stating such things as “I cannot remember the time of the disaster” or “I want to have as few contacts as possible with others”. Adequate observation of these symptoms and nursing support are important during life in the shelter when the future is unclear.

### ◆ Assessment of psychological stress and loss of hope

1. Mental condition (anxiety/fret, irritation, anger, depressive tendency)
2. Sleep state (insomnia, depth of sleep, difficulty in falling asleep and waking after sleep onset)
3. Physical symptoms (increase in blood pressure, increase in glucose, digestive symptoms, shoulder stiffness, malaise and headache)
4. Living state (environment in the temporary housing and personal relationships with surrounding people)

## ◆ Coping methods for psychological stress and loss of hope

1. Carry out the above assessment at regular health consultations including during rounds, and evaluate mental condition, sleep state and physical symptoms
2. Listen to elderly residents carefully allowing as much time as they need, in a place they feel relaxed, and paying close attention
3. Make arrangements for visits to or by mental health specialists to elderly residents with psychosomatic problems
4. Where there are sleep disorders, evaluate and eliminate factors affecting sleep, introduce sound sleep measures (such as earplugs) and make arrangements for visits to medical institutions



## ● Assessment of developing PTSD and its prodromal symptoms

\* In addition to the above assessment (for psychological stress and loss of hope), the following assessment should be performed.

1. Assess for PTSD and its prodromal symptoms (such as continuous crying when remembering the time of the disaster, being unable to remember the time of the disaster and reluctance to have contact with others)
2. Perform regular health consultations by making rounds of temporary housing, and evaluate the general physical and mental conditions of elderly residents
3. Evaluate stress associated with personal relationships and exchange with others in temporary housing

## ● Coping methods for developing PTSD and its prodromal symptoms

1. When there are symptoms of PTSD make arrangements for visits to or by psychiatrists or mental care specialists (such as clinical psychologists, mental health nurses and counselors)
2. Communicate as much as possible, and establish mutual trust
3. Perform regular mental health consultations and recommend regular counseling, where necessary
4. Plan group recreations such as lunch/dinner parties and tea parties
5. Ensure that nurses who perform rounds of temporary housing are continuously involved in the same cases whenever possible



## Increase of elderly persons with dementia

Physical and mental fatigue and changes in physical condition following disaster and prolonged evacuation are associated with an increase in the number of elderly people with dementia and aggravation of its symptoms. Therefore, it is important to monitor the following:

### Assessment of dementia



1. Monitor physical function: vital signs, dehydration, constipation, incontinence and pain
2. ADL
  - 1) Assess attention to and ability to concentrate on meals, refusal to eat and overeating
  - 2) General toileting state, understanding of toileting methods and unclean behavior
  - 3) Attention to cleanliness and grooming, and ability to clean themselves
  - 4) Spontaneously speech, expression of will and personal exchange
3. Cognitive function: memory disorder, disorientation and misjudgment
4. Behavioral disorder: hallucination, delusion, aimless wandering, unclean behavior, pica

Problems in the above 1–4 indicate aggravation of dementia or manifestation of symptoms. The following coping methods are required:

## Coping methods in elderly residents with dementia

1. Regulate rhythm of the life and ensure a stable environment
2. Evaluate support by family members and caregivers and determine whether living in temporary housing is possible or not
3. Instruct the caregiver on the following points of dementia care, when living in temporary housing is possible with support by family members and caregivers:
  - (1) Family members/caregivers should help elderly people do as much as they can do in life, with assistance when necessary
  - (2) Caregivers should try to regulate rhythm of the life
  - (3) Caregivers should prevent elderly residents from becoming housebound by creating opportunities for them to go out, for example to go shopping or to take a walk
4. Ask neighbors to be understanding of the needs of elderly residents with dementia and to cooperate with caregivers in assisting them
5. When living in temporary housing is impossible, make arrangements for emergency short stays in long-term care institutions, after discussion with public health nurses, welfare-associated members and care support counselors





## Anxiety about life in the future due to the disaster

For elderly people who have retired and live on a pension, the loss of homes and properties through disaster may cause marked anxiety about future life. Many of them feel reluctant to move out of the temporary housing and there is a tendency for them to be left behind.

While these are not health care issues, it is important to provide psychosocial care based on the economical situation.

### Coping methods for anxiety about life in the future

1. Evaluate the economical situation and intentions of elderly residents during home-visits and plan life consultation meetings
2. Provide information about restoration, and collaborate with public officers taking charge of disaster management, especially where households consist of only elderly residents



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