

Bioterrorism and Older Volunteers

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The threat of bioterrorism in this country is very real. Nurses must be trained and ready to provide the nursing services to a diverse group of citizens victimized by a weaponized biologic agent. Nurses cannot do all of this work alone. One of the best resources to aid nurses will be volunteers – especially older volunteers, including older nurses. . Volunteering has long been valued in America as a means to help others. Older, often retired persons, frequently volunteer in all kinds of social programs. Yet, older adults are mainly unrecognized as a valuable asset in homeland security. Older adults may be the only flexible resource on whom first responders and subsequent caregivers can rely. Older adults have enormous life experiences from which to draw when dealing with disaster. Resnick (2008) states older persons are our role models of resiliency. Contrary to popular belief, older persons can be trained for volunteer work in a bioterrorism attack or any other disaster. This paper describes the role of older volunteers in the preventive planning, acute phase, and recovery phase stages of homeland security in case of a bioterrorism attack. The role of older nurses as volunteer is also discussed.

VOLUNTEER TRAINING

While anyone can be a good citizen offer help where needed, it is imperative that older persons who volunteer to participate on a “Ready Response” team be trained for their roles. Included in such training would be the following:

- Basics knowledge of how weaponized organisms present. Volunteers need to understand how such organisms are transmitted when

weaponized. They need to know the signs and symptoms of infection in the host, and the type of treatment, if any, that is prescribed in a crisis situation. Volunteers also will need to know projected mortality rates and what to do when they encounter a deceased person.

- Standards of infection control. Volunteers will need to learn universal precautions, as well as special precautions against particular agents. They also will need to know how to improvise if necessary.

- How to work with various groups of people. Trainees will need to learn how to communicate with of fearful families, especially those who have missing or infected family members. Training must include helping people suffering from dementia, or persons exhibiting extreme stresses. They must be trained to assist people who simply need comfort care. Older volunteers must also need to be trained to assist with end-of-life care.

- How to assist “first responders.” The success of competently managing a disaster is the ability of all team members to know what is expected of them and to carry out directives. Older volunteers must know the chain of command, especially first- and second-levels of supervisors. They must know their job description and how to carry out delegated tasks. They must become familiar with the paperwork that will be involved in their tasks. They must be taught the “art of disaster communication,” including the use of information technology as developed by federal disaster agencies (Weiner, 2006). They also must be encouraged to ask questions, to speak up, and to

report as directed.

OLDER VOLUNTEERS AND PREVENTIVE PLANNING

Older volunteers can provide valuable assistance prior to a bioterrorism event through general activities, elder-to-elder services and assembling survival kits.

General Activities. Older persons can be effective neighborhood watchers. They often know who does and doesn’t belong in a neighborhood. Some homeowners’ associations already encourage this type of surveillance. These watchers know to whom to report any suspicious activity.

Another general activity is assisting with the myriad clerical and inventory activities that are necessary to ensure that the logistics of the response teams are working well. The best older volunteers for these tasks are those who are already engaged in these activities in the business community.

Elder to Elder Services. Older volunteers can help elderly neighbors to develop and store health information such as a brief health history, a list of prescribed medications, the names and phone numbers of physicians, Social Security and Medicare information, details about family members and surrogates and advance directives. Such information can be saved to a flash drive for faster computer access and can be ready in case of evacuation.

Older volunteers can assist by notifying family members and surrogates of disaster plans, by ensuring that their elderly neighbors keep their prescriptions filled on time, and by keeping first-responders

apprised of any suspicious activities. Moreover, older volunteers will plan an essential role in pet care, so they will want to know who has a pet, the pet's health history, the name and phone number of the veterinarian, and what is to happen to the pet if the owner must leave home or is unable to care for a pet.

Preparing Survival Kits. Older volunteers usually do well with this task, as many have prepared all sorts of kits or packages, especially in times of war. Those volunteers living in disaster-prone areas may already know how to make kits. Older volunteers can make kits of food and water (selected by the response team), thermal blankets, first-aid supplies, goggles, flashlights and batteries, as well as personal necessities. These kits can be stored in the home for easy accessibility or in a designated warehouse according to the preparedness plan. If kits are to be stored at home, other items, such as a battery powered or crank radio, a non-electric can opener, and even a change of clothes can be added to the kit (Flame, et al, 2005 & Visiting Angels, 2006). Non-essential items, such as alcohol and cigarettes, should not be placed in the kits.

THE POST-BIOTERRORISM ACUTE PHASE

After a bioterrorism attack, older volunteers, if still healthy, should report to their supervisors, who will then issue task directives. Despite being trained and prepared, volunteers should anticipate situations and events that may require instant decisions or adapting to less than desirable conditions. For example, Thompson (2007) reports that a response team had to make a livestock viewing area into a fully equipped medical clinic on short

notice. Activities the volunteers will most likely be doing are the following:

Dealing with citizens who refuse to leave their homes. The older volunteer has the task of alerting health workers to persons who have signs and symptoms of infection or who refuse to evacuate their homes. In a bioterrorist attack, there will be persons who will refuse to leave their homes for a variety of reasons (Rosenkotter, et al, 2007). If the person is infected, the volunteer can assist the health professional in ensuring that appropriate infection control procedures are followed. Mandatory evacuation, however, will be the responsibility of law enforcement and the response officials..

Verifying Pharmaceuticals. One essential task that older volunteers can do is to help verify the inventories of the pharmaceuticals being received from the National Pharmaceutical Stockpiles. Pharmaceuticals and other goods being brought to the disaster must be accounted for, using standardized forms and procedures.

Provide data input. If there is electrical service, older volunteers can help with clerical activities such as inputting data on a host of statistical, biographical, logistical, and other data. Data management, on the surface, would not seem as important as treating victims, but gathering data is crucial to tracking the epidemiology of an attack, finding people, knowing where resources are, and in preventing chaos. Older persons, especially those with computer skills, are ideal for this task.

Help locate family members. In a bioterrorist attack, many families and friends can become easily separated. The older volunteer can

help in the search, by using phones, computers, and/or personal contact information to help locate family members. Also, older volunteers can help reduce the family's stresses by kind words and assurances.

Assist people experiencing emotional trauma. Stress, anxiety, hysteria, as well as other psychological signs and symptoms will certainly occur. Volunteers can be trained to comfort and support these victims. They can provide care, concern and encouragement. They can help locate family members, take care of personal tasks or simply provide solace to maintain calm. The volunteers also can be trained to mediate minor conflicts that arise out of fear and frustration.

Help With Children. Because older volunteers are often grandparents themselves, they have a knack for helping children feel loved and protected. Storytelling, listening, cuddling, and game playing are activities greatly suited to the talents of the older volunteers. They can supervise children and watch for any signs and symptoms of infection, reporting health problems to health-care professionals. Children with chronic diseases will appreciate having a grandparent figure to relieve feelings of uncertainty and isolation. Help at general information areas. Communication and information will be a major consideration during the acute phase after a bioterrorist attack. Not only will triage stations be established, but also information desks where people can receive and provide information, as well as be directed to appropriate resources. Many older volunteers, who have experience in volunteering at information desks will be ideal helping here.

Assist public-health and law-enforcement officials. As part of their

job descriptions, older volunteers will be expected to report any breaks in laws, protocols, and requirements to public health officials and law enforcement officers as directed. For example, if a citizen refuses to stay away from a contaminated area or if there is evidence of vandalism, the volunteers will be expected to report these problems.

THE POST-BIOTERRORISM RECOVERY PHASE

As the effects of the bioterrorist attack wane and people begin to take control of their lives again, older volunteers will still be needed. Not only will they resume their normal lives, they will still have neighborhood duties, as well as homeland security activities.

Helping victims. As victims of all ages return home from hospital and rehabilitation, they might still need the services of a volunteer. Older volunteers can coordinate home activities, such as making sure there is safe food and water in the house, pets have been retrieved, prescription drugs are available or obtained from a pharmacy, firefighters are notified that frail or disabled persons are again in residence, important papers are placed in a secure place and out-of-area family/significant others and/or surrogates are notified of the whereabouts of these persons. Volunteers can be supportive through daily visits or phone calls.

Assisting public officials. As directed by public health officials and law enforcement officers, older volunteers may continue observing their neighborhoods and reporting any suspicious activity to the proper authorities.

Supporting related activities. Older volunteers can be a vital part of debriefing after a bioterrorism incident, for they will have many

experiences to report, and can identify what did and did not work. They also make recommendations for any changes that might improve responses. Older volunteers also can provide clerical and inventory services as equipment and supplies are stored or sent to stockpiles.

Continued Training. Using information from the debriefing, first-responders (including volunteers) must make necessary changes in their protocols and procedures. The team must also conduct mock bioterrorism attacks to ensure readiness. According to Walker-Cillo (2006) and Thompson (2007), actual disaster drills were the most effective way to uncover any weaknesses in disaster preparedness plans.

MAINTAINING THE HEALTH OF OLDER VOLUNTEERS

Nurses will likely be called upon to ensure that older volunteers maintain their health, recognizing that they may have chronic conditions that require medication and prudent living. Nurses will need to recognize that their older volunteers are at risk for infection from a bioterrorist incident.

Nurses can help their older volunteers by ensuring that they take their medications as directed, have sufficient food and water, and sufficient time for toileting (which is usually more frequent than younger persons). Nurses should try to keep their older volunteers away from extreme temperatures if at all possible. Nurses should be very careful that their older volunteers avoid exceeding their cardiorespiratory reserves. Older volunteers should not be expected to climb steps frequently or carry out activities without periodic rest. Nurses will have to try to keep their

older volunteers from hazards that could result in falls, even though hazardous conditions may be unavoidable. Finally, nurses will need to draw upon their leadership skills to provide encouragement and support to their volunteers, especially if they appear to experience stress.

THE OLDER NURSE AS VOLUNTEER

One particular group of older volunteers that could be invaluable in a bioterrorist incident is older nurses who have partially or fully retired, but who are alert and active. Since younger nurses will likely be deployed to acute-care centers, a large part of the population with chronic health problems will remain, and they could benefit from the ministrations of these older nurses. In a crisis, older nurses could be mandated to reactivate their nursing skills.

Older nurse volunteers can be given refresher training to handle persons with chronic problems. State boards of nursing will have to consider special nursing or temporary nursing licenses to cover these nurse volunteers. The key word here is "readiness." These volunteers must be trained and ready to activate when needed.

Some state professional organizations have a list of trained "ready nurse responders" who can be contacted for activation in case of disaster. For example, the Texas Nurses Association has such a group. The TNA also is prepared to contact all members at a moment's notice, asking for volunteers. Of course, the American Red Cross has been a mainstay in encouraging nurses to volunteer in disasters.

Areas where older nurses will be most valuable will be caring for the chronically ill at home, especially

people with diabetes, cardiovascular conditions, respiratory difficulties, renal failure, functional disabilities, and cognitive problems

These older nurses may be needed at nursing homes and assisted-living facilities, especially if staff nurses have been deployed elsewhere. On the other hand, nursing homes could possibly be commandeered to serve as hospitals for victims. Older nurses assigned to these makeshift hospitals could provide invaluable services to response teams assigned there, especially for victims requiring end-of-life care.

Another area where older nurses have proven to be valuable has been at shelters for those citizens not infected with a weaponized agent. The nurses' value has already been demonstrated in natural disasters, where the volunteer nurses' once-learned skills and abilities easily rose to the required tasks. Shelters designated as chronic illness centers must be equipped to provide dialysis, oxygen therapy, and other service requiring equipment (Cary & Schroeder, 2008; Flume, 2005). Older nurse volunteers will need to be trained to use or assist in the use of this equipment.

If older nurses are unable to practice their clinical skills, there are other volunteer opportunities. For example, these nurses might be able to provide ward secretary duties. They can perform logistic duties, especially in infection control; use their knowledge and professional intuition to pick up signs and symptoms of infection in staff, patients, and others; and offer support and comfort to patients, staff, families and anyone else within their purview. Older nurses need not question whether or not they are still nurses. In a disaster situations, older nurses are indeed

still nurses.

SUMMARY

Nurses must be trained and ready to respond to a bioterrorist attack. This includes developing an ability to manage older volunteers, particularly older nurses. Older people are often unrecognized yet valuable assets in homeland security. They can play a vital role in preplanning, assisting first-responders, public health officials and law enforcement personnel in caring for and protecting noninfected persons during the acute phase of a bioterrorist attack. Older volunteers also can play a crucial role in the recovery phase of a bioterrorist attack. Nurse first-responders will need to protect (as much as the situation allows) the health of their older volunteers. Older nurses will also be called upon to use their clinical and managerial skills during a bioterrorist attack.

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Bioterrorism and the Older Volunteer

Complete the following test questions.

1. Members of a community who should be involved in planning for a bioterrorist attack include all of the following EXCEPT:
 - a. Public health officials
 - b. Trained "First Responders"
 - c. Older adults
 - d. "Doctors Without Borders"
2. Which of the following is NOT considered an appropriate role for nurses in a bioterrorist attack?
 - a. Being a good leader
 - b. Placing all volunteers under the direction and supervision of social workers
 - c. Demonstrating their "readiness" training
 - d. Caring for victims' co-morbid conditions as well as the effects of the weaponized organisms
3. The training of older volunteers is the responsibility of
 - a. Federal government
 - b. The "First Responder" group
 - c. The medical school
 - d. The Red Cross

4. Training provided older volunteers in preparation for a bioterrorist attack includes all of the following EXCEPT:

- a. How to assist “first responders”
- b. Basics of effects of weaponized organisms
- c. How to provide midwifery services
- d. Standards and procedures of infection control

5. Older persons make good “first responders” because of all of the following EXCEPT:

- a. They have experience in putting kits together
- b. They are resilient
- c. They are expendable
- d. They can cuddle and comfort children

6. Which of the following is an appropriate activity for older adults in a bioterrorism pre-attack phase?

- a. Being a “neighborhood” watcher”
- b. Keeping neighbors’ important papers in the volunteer strong box
- c. Informing neighbors’ families that their homebound frail and disabled relatives will be just fine under care of the volunteer
- d. Avoiding communication with neighborhood firemen and police

7. The survival kits that older volunteers might be asked to prepare should contain all of the following EXCEPT:

- a. Flashlights and batteries
- b. First aid supplies
- c. Bourbon and cigarettes
- d. Thermal blankets

8. During the acute phase of a bioterrorist attack, older volunteers would most likely have the following activities EXCEPT:

- a. Providing data input into

computers

- b. Managing the distribution of pharmaceuticals to specified sites
- c. Providing comfort and support to families and displaced persons
- d. Alerting health care officials to neighbors who have signs and symptoms of an infection

9. In the recovery phase of a bioterrorist attack, older volunteers could be expected to:

- a. Help victims returning home from hospital and rehabilitation
- b. Avoid contact with any neighbors who had a bioterrorist infection
- c. Encourage neighbors to recognize that their lives will never be normal again
- d. Open their homes as convalescent centers

10. In order to help older volunteers maintain their health during the aftermath of a bioterrorist attack, nurses should do all of the following EXCEPT:

- a. Stress fall prevention to the volunteers
- b. Encourage older volunteers to take their medicines as prescribed
- c. Try to keep older volunteers away from extremes of temperatures
- d. Encourage older volunteers to exercise vigorously before they report for work

11. Older volunteers should be included in the evaluations of which of the following stages of “ready response” in homeland security?

- a. Preventive planning phase
- b. Acute phase
- c. Recovery phase
- d. All of these phases

12. Requirements for being an older nurse volunteer in a bioterrorist attack include all of the following EXCEPT:

- a. Having advanced practice certification
- b. Having refresher training in the care of patients with chronic illness
- c. Obtaining a special license from the Board of Nursing if not presently licensed
- d. Having required disaster training according to the Response Team’s protocols and procedures

13. Which statement best describes the role of the older nurse in a bioterrorist attack?

- a. Provides nursing care to ventilator-dependent victims in the ICU
- b. Hires staff to provide care in shelters
- c. Provides nursing care to chronically ill patients who are stable and not infected with the weaponized agent.
- d. Manages the flow of supplies and resources in hospitals

14. If older nurse volunteers are unable to perform clinical nursing duties, they could, instead, serve as:

- a. Janitorial staff
- b. Unit secretaries
- c. Hospital administrators
- d. Medical records administrators

TITLE: Bioterrorism and Older Volunteers

PURPOSE: This self-study is designed to help nurses understand the value, role and function of older volunteers in homeland-security.

To receive continuing nursing education credit, the registrant must:

1. Read the self-study.
2. Complete the post-test (score of at least 75 percent).
3. Complete the evaluation form.

4. Mail the post-test (with \$10 payment) and evaluation form to TNA, District Four.

Upon receipt of the required forms (the post-test with a score of at least 75 percent and evaluation form) by TNA, District 4, the registrant will be mailed a CE certificate.

This activity provides 1.0 contact hour for the nurse. TNA, District Four is an approved provider of continuing nursing education by the Texas Nurses Association.

**EVALUATION FORM:
"Bioterrorism and Older
Volunteers"**

OBJECTIVE: To increase awareness of the role that older volunteers, particularly older nurses, can play in a bioterrorist incident.

NAME: _____

TELEPHONE: () _____

ADDRESS: _____

CITY: _____

STATE: _____

ZIP: _____

BIRTH MONTH/YEAR/_____

PROGRAM EVALUATION:

Please rate how well objectives were met by circling the appropriate number:

1 Not Met

2 Partially Met

3 Met

4 Well Met

1. Identify how older volunteers can help plan for and respond to a bioterrorist attack.

1 2 3 4

2. Explain how to help older volunteers maintain their health and readiness.

1 2 3 4

3. Describe how older nurses in particular can assist first-responders in a crisis situation.

1 2 3 4

Please rate the quality of teaching materials by circling the appropriate number:

1 Strongly Disagree

2 Disagree

3 Agree

4 Strongly Agree

1. The objectives were relevant to overall purpose.

1 2 3 4

2. The teaching/learning materials were effective.

1 2 3 4

3. Program was organized.

1 2 3 4

4. Program was easy to follow.

1 2 3 4

If you answered 1 to any of the above, please provide comments.

How long did it take to complete the program? _____

Date Completed: _____

MAIL the completed evaluation with your test results and \$10 payment to:

TNA, D-4, P.O. Box 35503, Dallas, Texas 75235.

