American Academy of Nursing on Policy

American Academy of Nursing on Policy position statement: Disaster preparedness for older adults

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Executive Summary

The American Academy of Nursing recognizes the significant impact of natural disasters on older adults. Unfortunately, despite decades of planning, deficiencies continue to exist in disaster preparedness for this population. While recent federal and state legislative efforts have attempted to address some of these issues, gaps in allowing for a consistent level of preparedness and disaster response across the U.S. continue to be exposed. This position statement outlines practical policy and organizational recommendations to enhance the ability of frontline providers, health care organizations and emergency planners in responding to disasters on the behalf of older Americans, the most rapidly growing sector of the United States (U.S.) population.

Background

According to the U.S. Census Bureau, for the first time in 2030, older adults are projected to outnumber children (U.S. Census Bureau, 2017). Concurrently, climate change, recognized as perhaps the biggest global threat of the 21st century, is expected to drive more frequent and extreme weather events (Field et al., 2014). The year 2017 was historic in terms of weather and climate related disasters in the United States, making it the costliest disaster year on record (National Oceanic and Atmospheric Administration, 2018). Three category-4 hurricanes- Harvey, Irma and Maria- all made landfall in the U. S., occurring in late August, early September, and mid-September, respectively. These hurricanes caused unprecedented amounts of rainfall which produced historic flooding, severe winds, and storm surges. These events resulted in billions of dollars in physical damage, injuries, and death (Smith, 2018). In addition to the hurricanes, 2017 was also a record year for natural disasters that included wildfires in California, Washington State, Montano, Oregon and Idaho (Ridler, 2017).

It has become well accepted that older adults bear a disproportionate burden of poor health outcomes and mortality when faced with disasters of all types.Older adults are more likely to have chronic health conditions, impaired physical mobility, diminished sensory awareness, or social and economic limitations that restrict their ability to effectively prepare for, respond, and adapt to disasters. In 2005 nearly half of all deaths (49%) resulting from hurricane Katrina were of persons 75 years of age and older (Brunkard, Namulanda, &

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Ratard, 2008). Similarly, following Hurricane Sandy in 2012, the New York Times reported that close to half of those who died in the storm were 65 or older. Many of those older adult victims drowned at home; others died from storm-related injuries, hypothermia and other causes.

The interruption of medical care has been noted as a major cause of increased mortality rates in the months following a major disaster (Kishore et al., 2018). Older adults tend to have several chronic illnesses requiring long-term treatment with medications. Because the wording in laws or regulations regarding "emergency" prescription refill protocols varies on a state-by-state basis, older adults may be forced to go without medications for extended periods of time. Interruptions in medication regimens can exacerbate underlying conditions and increase the risk of morbidity or mortality. Older adults in long-term care settings, as well as those dependent on life-sustaining equipment, are further disproportionally impacted by disasters. The loss of electricity needed to power medical devices such as ventilators or assistive technology can be life-threatening, underscoring the need for adequate disaster planning for this growing population.

Incorporating lessons learned from the past to establish a more coordinated and defined response to both natural and man-made disasters, the Centers for Medicare and Medicaid (CMS) issued its final rule, *Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers* (Department of Health and Human Services [DHHS], 2016). The final rule became effective on November 15, 2016 and issues emergency preparedness requirements for seventeen Medicare and Medicaid participating providers and suppliers. It goes further to require coordination with federal, state, tribal, regional, and local emergency preparedness systems. However, despite years of planning to improve the nation's response to widespread catastrophic disasters, including the implementation of the CMS final rule in 2017, serious deficiencies in the emergency preparedness for at risk older adult populations continue to exist. For example, during the 2017 hurricane season, tragedy occurred in a Florida nursing home after hurricane Irma disabled the facility's air conditioning system. In that case, 14 residents died as a result of post hurricane heat, eight of whom were between the ages of 71-99 years (Weixel, 2017). The image of older adults sitting in wheelchairs and lounge chairs while stranded in waist- level water in a flooded assisted living facility in Texas following hurricane Harvey (Fortin, 2017) highlighted a dangerous gap in uniform emergency preparedness regulations for vulnerable older adults in these settings that was not addressed under the new CMS final rule.

The most vulnerable of adults with complex health care needs reside in nursing homes. According to the 2015 *Nursing Home Data Compendium* issued by the Center for Medicare and Medicaid, in 2014, approximately 1.4 million people in the United State resided in nursing homes, many in states or geographical areas that are prone to natural disasters such as Louisiana, Florida, and Texas (DHHS, 2015). According to this report, 62% of nursing home residents had a moderate or severe cognitive impairment, while 63.1% were living with four or five activities of daily living (ADL) impairments (DHHS, 2015). These two statistics highlight the vulnerability of nursing home residents from a cognitive and functional standpoint, underscoring the importance of comprehensive evidence-based disaster and emergency preparedness guidelines and processes to support disaster response including sheltering in place, mass evacuation and relocation activities when required.

State governments have jurisdiction in regulating assisted living facilities and oversight of compliance with state laws and regulations. However, because these settings are licensed at the state level and not at the federal level, the rules and regulations can differ significantly from state to state, including those related to emergency preparedness and response requirements. Currently, assisted living communities are the largest provider of residential care for older adults with dementia, and this trend is expected to continue as approximately 42% of allresidents in these facilities have moderate to severe dementia (Zimmerman, Sloane, & Reed, 2014), again highlighting the increased vulnerability of these older adults during and following a disaster.

Finally, in considering the preparedness of front-line healthcare professionals to effectively respond to disasters, two common issues have surfaced. First, although nurses represent the largest group of the healthcare workforce and are at the forefront of the healthcare response to disasters, findings from assessments of professional readiness indicate that many of the nation's nurses are ill-prepared to respond to the complex demands of disasters (Veenema et al., 2017). Second, healthcare professionals, including nurses, who desire to travel across state lines to provide assistance in other jurisdictions, often face barriers in getting their credentials verified in a timely manner to allow them to quickly respond to disaster-stricken areas where their expertise and skills are in high demand.

Recommendations

It is the position of the American Academy of Nursing to advocate for effective emergency preparedness and disaster planning for all older adults. Because older adults in long-term care settings represent a particularly vulnerable population, the following recommendations target this subpopulation of older adults:

1. Assisted living facilities should have uniform emergency disaster preparedness requirements and oversight to ensure compliance. Further consideration should occur around strengthening and

amending the 2016 U.S. Department of Health and Human Services final rule (*Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers*) to require that all licensed care facilities, subject to any applicable state size requirements, submit practical emergency plans for approval to their state governments, and local emergency management services.

2. Nursing homes and assisted living facilities, as providers of health care services, should be classified within each state's emergency response system for Public Health and Medical Services, thereby making these facilities eligible for federal evacuation resources under the federal National Disaster Medical System.
3. Nursing homes and assisted living facilities should be assigned a high priority for power restoration by their local utility companies, similar to the level that hospitals would receive. Furthermore, the prioritization of power restoration to these facilities should be incorporated into the framework of local, state, and national emergency preparedness planning and response efforts.
4. Nursing homes and assisted living facilities should be required to have their own back-up generators that support heating, ventilation and air conditioning (HVAC) systems, especially in light of the recent tragic examples and consequences of power failures that have occurred in conjunction with weather related disaster events. Although the CMS final rule has requirements for "alternate sources of energy to maintain temperatures to protect resident health and safety" (DHHS, 2016, p. 64030) it does not specifically require the presence of back-up generators for HVAC systems. To enable this proposed requirement, some level of state and or federal funding should be made available to provide nursing homes and assisted living facilities with the necessary finances to achieve compliance. Additionally, uniform guidelines and protocols related to temperature control following power outages should be required, including protocols and mechanisms that provide for accurate temperature monitoring and readings at all times.
5. Due to the frailty, limitations in ADLs, and level of cognitive impairment in many nursing home and assisted living facility residents, targeted funding of disaster research to inform evidence-based actions and decisions regarding safe evacuation and sheltering in place for these populations is warranted.

Legislative Actions and Recommendations

Below is a list and overview of legislation beyond the CMS final rule which hasattempted to improve disaster planning and response. Included in the summaries below are recommendations and suggestions for improving these legislative efforts to close existing gaps.

1. **Florida legislation (HB 7099 and SB 7030) entitled: *Emergency Environmental Control for Nursing Homes, 2018***

   Signed into law by Governor Rick Scott on March 26, 2018, this legislation requires facilities to have alternative power sources (i.e. generators), that maintain temperatures at 81 degrees Fahrenheit or cooler for at least 96 hours, in a "sufficient portion of the facility to accommodate all of the facility's residents." Further, areas cooled are required to be at least the equivalent of 30 square feet per resident. In addition to requiring nursing homes to keep 72 hours of fuel on site, the rule requires that policies and procedures be implemented by each facility to ensure that the residents do not suffer from complications of heat exposure. However, in recognition that temperatures can vary significantly based on geographical locations and that disasters can occur at any time, it is recommended that individual states adopt legislation that address climate specific variations to avoid complications of both heat and cold temperature exposures.
2. **Senate Bill 1834 to amend title XXVIII of the Public Service Act to establish a National Advisory Committee on Seniors and Disasters, 2017**

   The bipartisan legislation introduced by Senator Nelson [D-FL] and cosponsored by Senators Rubio [R-FL], Casey [D-PA], and Collins [R-ME] titled *Protecting Seniors During a Disaster Act*, establishes a 15 member National Advisory Committee appointed by the secretary of Health and Human Services, comprised of federal and local agency officials and non-federal health care professionals with experience in disaster response (Protecting Seniors During Disaster Act, 2017). While the advisory committee was established to provide advice and consulting on issues related to the preparedness of safety for seniors during a disaster, it is strongly recommended that evidence based research be incorporated into the decision making, advice, and recommendations of the committee. In addition, the list of suggested committee members should be augmented to include at least two older adults and should include a greater involvement of representatives from the private sector.
3. **The Enhanced Nurse Licensure Compact (eNLC), an updated version of the current Nurse Licensure Compact (NLC).**

   The eNLC allows for registered nurses and licensed practical/vocational nurses to have one multistate license, with the privilege to practice in their home state and other NLC states. One of the benefits of the NLC is that it allows nurses to quickly cross state borders and provide vital services in the event

of a disaster. While the establishment of a licensure compact for nurses can reduce existing barriers to interstate health care assistance during disasters, this legislation has not been enacted nationwide. Currently only 31 states have adopted the eNLC (National Council of State Boards of Nursing, 2018). To facilitate the ability of nurses to cross state borders to provide vital services in a timely and efficient manner in the event of a disaster, it is recommended that all states adopt this legislation.

4. In response to natural disasters such as hurricane Harvey, the Texas Pharmacy Act (Sec. 562.054) and board rule (291.34) allows up to a 30-day supply of prescription medication, other than a Schedule II controlled substance, to be dispensed by a pharmacist without the authorization of the prescribing practitioner if specific criteria are met. While a similar provision also exists in the Florida Statues (2018), 252.358, *Emergency-preparedness Prescription Refills*, the wording in laws or regulations regarding "emergency" prescription refill protocols can vary state by state.

Interruptions in medication regimes can result in acute exacerbation of chronic illnesses, placing older adults at risk for poor health outcomes. Therefore, it is important to ensure that all state Board of Pharmacy rules authorize at least a 30- day supply of medications during a state of emergency.

Conclusion

The increasingnumber of older adults in the United States,coupled with the certainty of future disasters due to climate change, demands the nation and the nursing profession immediately address thedearth of adequately prepared geriatric healthcare professionals to meet the complex needs of older adults before, during, and after disasters.

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