

# Disaster Preparedness

## Keeping Nursing Staff and Students at the Ready



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### KEYWORDS

- Continuing education • Crowdsourcing • Nursing students • Disaster planning
- Mass casualty incidents • Natural disasters • Simulation training • Virtual reality

### KEY POINTS

- Declared disasters are increasing worldwide.
- A disaster preparedness conceptual model can serve as a guide for the development of disaster preparedness plans and disaster preparedness curriculum.
- Staff nurses should be in a state of continual disaster preparation.
- Staff and student nurse disaster preparation training should include the disaster plan, first aid, and disaster management.
- Technology supports successful disaster preparation training and disaster management.

### BACKGROUND

Disasters leading to loss of life and property have been occurring in human societies since the beginning of recorded history. Disasters take a toll on those inflicted, striking all social, economic, and racial groups with little to no warning, and can last hours to months at a time. Health care organizations, specifically hospitals, can also be a victim of disaster events, including natural disasters (eg, weather events), man-made disasters (eg, mass shootings, cyberattacks), and disasters of circumstances (eg, power

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failures or internal floods). The generally unpredictable nature of disaster continues to impact our health care systems and populations worldwide.

Health care organizations have an ethical responsibility to act when disasters occur to provide immediate care to the sick or injured and, in the longer term, help stabilize the community in which they reside. Disaster preparedness is essential to hospital readiness to respond in a crisis. National regulations require hospitals to assess for disaster vulnerability and prepare a disaster plan for use during a crisis.<sup>1</sup> All hospital staff members, including providers, must be ready with the knowledge of the hospital disaster plan and their role within it.

### ***Regulations and Standards***

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After the events of September 11, 2001, when a group of terrorists attacked the World Trade Center, the United States increased its efforts in the development of disaster preparation.<sup>2</sup> Health care organizations participating in Medicare billing, including hospitals, are required to meet the standards put forth by the Center for Medicare and Medicaid Services (CMS). Those standards are assessed by an external regulatory body for hospital compliance and reported back to CMS as a condition of participation in Medicare billing. In 2016, the CMS issued the *Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers Final Rule* to establish emergency preparedness by health care organizations for disasters.<sup>1</sup> Following the announcement of CMS standards, The Joint Commission, a regulatory body with a mission to survey hospitals for CMS Regulatory compliance, began to survey hospitals for compliance with that rule after November of 2017. In addition to its survey function, The Joint Commission provides resources to health care providers to aid in the assessment of vulnerability and development of a disaster plan.<sup>3</sup>

Recognizing the critical role nurses play in disaster management, leaders in academia incorporated disaster preparation into educational standards for the nursing curriculum. The American Association for College of Nursing (AACN) released new core competencies in 2021 for undergraduate and graduate-level education that incorporated disaster preparation under Domain 3, Population Health.<sup>4</sup> Competencies for undergraduate and graduate nursing students involving disaster preparation are listed under Essential 3.6, Advance Preparedness to Protect Population Health During Disasters and Public Health Emergencies.<sup>4</sup> Literature showing the need for disaster preparation for nurses has also been published in Europe, Asia, Middle East, and the Pacific Islands and covers topics of preparation for both practicing nurses and nursing students.<sup>5-7</sup> Furthermore, the International Council of Nurses (ICN) published *Core Competencies in Disaster Nursing*, establishing consensus on the definition of disaster nursing, the role of the nurse in disasters, and competencies to guide nursing leaders and educators in disaster preparation for nurses.<sup>8</sup>

### ***Role of the Hospital in Disaster Management***

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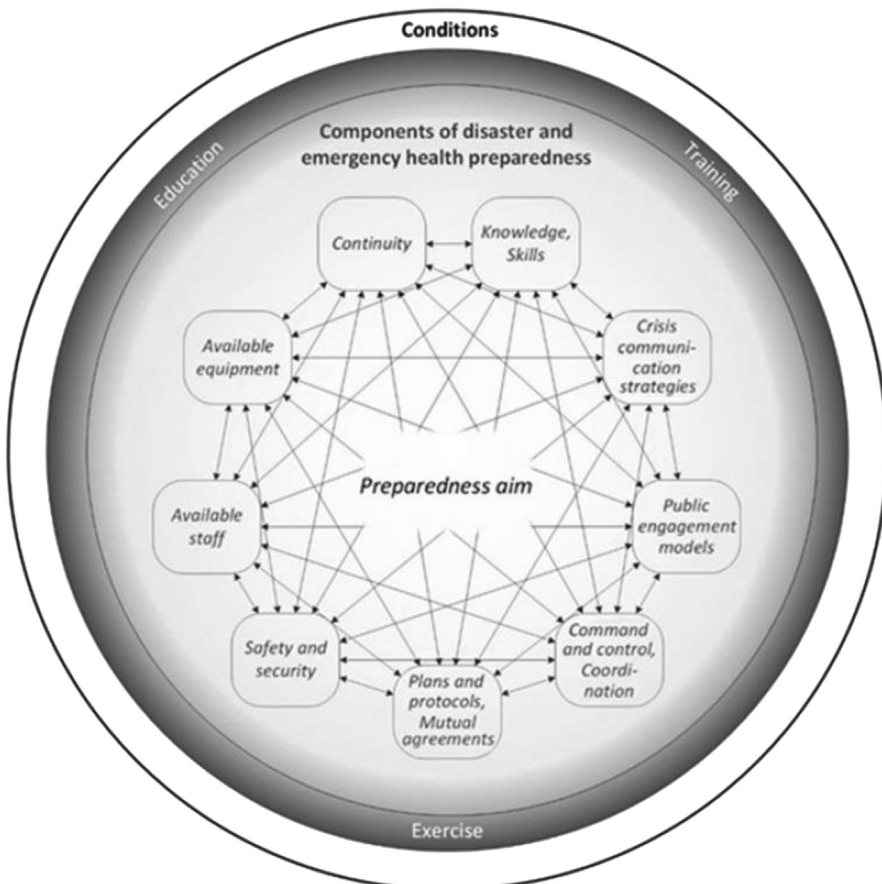
Disaster management has four phases: preparedness, mitigation, response, and recovery.<sup>9</sup> Hospitals, as a member of their community, play a role in each of the phases. The preparedness phase involves both an external and internal organizational assessment of the vulnerability of disasters, the development of a disaster plan, and the organization's involvement in external (community-based) and internal drills to practice preparedness for potential disasters. During the development of the disaster preparedness plan, the hospital will assess for potential barriers to its operations (including patient care) during a disaster. The assessment findings and subsequent mitigation factors are incorporated into the disaster preparedness plan during its development. The response phase involves the implementation of the disaster plan

during a crisis to provide care, save lives, and restore community health. After the crisis, the recovery phase begins as the community and hospital attempts to establish normal systems of daily operation which could involve repairs to damaged infrastructure, temporary housing, restoration of essential services (eg, transportation, electrical, communication), and health services (eg, primary care, surgical services, mental-health services).<sup>9</sup>

### Conceptual model for hospital disaster preparedness

Verheul and Dückers<sup>10</sup> developed a conceptual model for hospital disaster preparation based on definitions of disaster preparation and operationalization in a systematic literature review of 40 articles (Fig. 1). The authors define hospital disaster preparedness as follows:

*...a capability or capacity to respond to health needs and morbidities disaster-affected populations (external focus) and the ability to stay operational under critical conditions when the demand for care and the availability of time and resources is scarce (internal focus)<sup>10</sup>*



**Fig. 1.** Vereul & Dückers nonagon for disaster preparedness in hospitals. (Verheul M, Dückers M L A. Defining and operationalizing disaster preparedness in hospitals: A systematic review. *Prehosp and Dis Med* 2020; 35, 61 – 68.)

At the center of the model is “Preparedness Aim,” which is the goal of the organization’s efforts concerning disaster preparation. The authors reviewed and organized information from data in the articles describing operationalization of disaster preparation, and then they categorized that information into nine components which they placed in the center of the conceptual model. They assumed that the components are related to each other and that each component must be taken into consideration when developing a disaster response plan. The outer ring of the model depicts the activities that would enhance preparation for disaster planning and assumes that the status of preparedness is dependent on conditions that include education, training, and exercises.<sup>10</sup>

Although the authors indicate the model and its components need further research for clarification and causation between the concepts, a strength of the model is that it identifies the components of disaster preparation. The model factors in the resources of people, equipment, and services, and it identifies the functions of communication, command, and engagement of partners (internal and external), each of which mirrors similar components of the organizational strategic plan familiar to most health care leaders. The conceptual model serves as a guide to health care leaders in the development and review of their organizational disaster preparation plan. Educators can use the model to review curricular components for the education of nursing students on disaster preparedness.

### ***Disaster preparation for nurses***

Nurses play a significant role in disasters not only as caretakers for those who are affected but also as rescuers who conduct triage, manage resources, coordinate care, facilitate communication, and operate as trainers, counselors, and information distributors.<sup>9,11</sup> Although the number of declared disasters is increasing worldwide, nurses do not believe that they are prepared to fulfill their role in disasters, including rendering aid to victims.<sup>6,12,13</sup> In one study, researchers noted anecdotally that nursing students participating in a disaster simulation had erroneously assumed staff nurses involved in the project were aware of their facility’s disaster plan.<sup>12</sup> In another account from the literature, the authors described an actual explosive event that occurred in an outpatient facility which illuminated the fact that staff at the facility, including nurses, lacked the knowledge and preparation to use the facility’s disaster plan.<sup>13</sup> A systematic review of 17 studies revealed that nurses believed they were not adequately prepared for disasters, reporting low-to-moderate levels of preparedness.<sup>14</sup> The authors reported that a majority of nurses were aware that their facility had a disaster plan. One-quarter of nurses had not reviewed the plan, and up to 10% of them could not locate it.<sup>14</sup> Another systematic review supported the finding that nurses believed their disaster preparation ranged from weak to poor.<sup>6</sup>

What do nurses need to know to be prepared for disasters? Common domains of knowledge pertaining to disaster preparedness for nurses include communication, planning, decontamination, incident command systems, and ethics.<sup>9</sup> Labrague and colleagues<sup>14</sup> reported that nurses wanted to develop skills in “first aid training, field triage, advanced basic life support, and infection control.”<sup>(p49)</sup> The ICN’s Core Competencies in Disaster Nursing Version 2.0 provides additional resources for nursing competency development in disaster preparedness.<sup>8</sup> An additional resource for competency domains for nursing practice during disasters is the ICN’s *Core Competencies in Disaster Nursing Version 2.0*.<sup>8</sup> The ICN document provides eight domains with accompanying competencies (**Table 1**) for both the General Professional Nurse and the Advanced or Specialized Nurse. The ICN domains and accompanying competencies comprise a comprehensive, evidence-based competency set that can be

<b>Domain</b>	<b>Category</b>
1	Preparation and Planning
2	Communication
3	Incident Management
4	Safety and Security
5	Assessment
6	Intervention
7	Recovery
8	Law and Ethics

used by health care organizations as a foundation for training and education of nurses and other staff.<sup>9,14</sup>

Authentic experience in a real disaster is associated with an increase in a nurse's perception of preparedness.<sup>11,14</sup> However, before the COVID-19 pandemic, most nurses reported a lack of experience in actual disaster events. Training coupled with participation in disaster-drill practice also has a positive influence on nurses' belief of preparedness for actual disasters.<sup>13,15,16</sup> The Joint Commission published a standard requiring health care organizations to provide two disaster drills per year for staff training (hospitals may count participation in an actual disaster for one of the drills).<sup>3</sup> Practice drills must be accompanied by other learning methods to introduce nurses to the competencies as outlined by the ICN and the details of organizational disaster plans. Regular practice and ongoing learning are key to maintaining competency and preparedness; modalities of learning include didactic modes, debriefing from events, independent instruction, blended learning, and technology-enhanced learning.<sup>13,15,17,18</sup>

Leaders are challenged to keep their staff ready with an understanding of the disaster plan, preparedness to fulfill their roles in a disaster, and ability to use equipment and protocols that may not be part of their daily routine. This challenge can be met through the use of technology embedded into a preparedness plan. Most staff are familiar with or participate in social media, which is recognized for its educational value.<sup>15</sup> Ghezehjeh and colleagues<sup>15</sup> showed disaster preparedness knowledge in staff nurses, improved with the utilization of social media to deliver training content. Staff nurses received one training per day in the form of text messages, video clips, or images, totaling 34 short training sessions based on disaster preparedness. An educational intervention such as this could augment annual disaster training by providing a steady stream of disaster preparedness content to nurses.

Nursing leaders routinely participate in disaster planning activities. However, staff nurses should have a seat at the table for development, review, and implementation of facility disaster plans. Staff nurses should also be invited to observe their facility Incident Command Center (ICC) in operation. Through observation in the ICC, staff nurses can conceptualize the plan, the role they play within it, and evaluate performance after the event through debriefing.

Disasters can affect any entity, population, and location. They can be external to hospitals (industrial explosions, weather events, transportation accidents, and mass shootings) or be internal as in the example of the explosion at the outpatient facility.<sup>13</sup> Hospitals are additionally vulnerable to disasters. Two examples of disasters that

directly impacted hospitals include Hurricane Katrina and the resulting damage to Memorial Medical Center in Houston, Texas, and a tornado that hit St. John's Regional Medical Center in Joplin, Missouri. Internal hospital disasters can take the form of hospital fires, floods, power outages, cyberattacks, or communication and technology failure to name a few.<sup>19</sup> The authors of this article have held leadership roles in a small, community-based, urban hospital and have experienced three declared disasters (one flood and two power outages). The disaster caused by a total hospital power failure, including the backup generator, caused elevators to stop working; stairwells were pitch black; air handlers stopped working, including air conditioning; and computer, phone, and paging systems were all offline. Experiencing a real disaster validates the need for staff nurses to be familiar with how to handle a large-scale crisis in their own environment. Disaster preparation must include training on any contingency plans for computer system or communication failure (including the electronic health record).<sup>19</sup> In a disaster, nurses may find themselves working in unfamiliar settings, unfamiliar circumstances, with unfamiliar equipment, protocols, or other professionals whom they have not worked with before.<sup>2,20</sup> Essential skills such as triage, first aid, evacuation procedures, and knowledge of facility structure (eg, how to close oxygen and other gas lines, location of evacuation routes, and how to use evacuation equipment) should be included in training and reinforced periodically, as with any infrequently used skill. Examples include having all staff, including nurses, complete the Stop the Bleed program for massive hemorrhages or routinely practice using evacuation hammocks in stairwells with mannequins.

### ***Resilience and Mental-Health Interventions***

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Disasters impact both individuals and groups within a society and can last for brief periods of time to months or years, as with the COVID-19 pandemic.<sup>21</sup> Exposure to such long periods of stress can have a negative impact on the health and well-being of not only the victims of the disaster, but also on those responding as rescuers, including nurses. Such stress reduces the capacity for rescuers to perform and provide care.<sup>21</sup> Building the capacity for resiliency in rescuers is crucial to the mission of responding to disasters. Disaster plans should incorporate resilience and mental-health interventions (short term and long term), not only for the victims, but for rescuers as well.<sup>21</sup> Interventions to increase resiliency can include professional consultations and work structure adjustments. For example, disaster preparedness plans should include on-site chaplaincy, psychological counseling, and the use of telemedicine for long-term needs. Health care leaders should also consider shorter shifts with longer periods of rest for rescuers.<sup>7</sup> Social support is key to helping responders to disasters remain resilient in the face of such stress.<sup>22</sup> However, not all responders will take advantage of mental-health interventions offered to them because of barriers that hinder their use, such as the social stigma associated with mental-health crises.<sup>22</sup> Disaster training curricula should include discussions about psychosocial care, including the topic of social stigma and the role it plays in impeding treatment.

Another source of stress for nurse rescuers is concern for their own family well-being during the disaster and, potentially, the need to inform family members that they will be participating in rescue or care of victims of a disaster.<sup>2</sup> Winans recommends that disaster preparedness includes assisting nurses to preplan with their families for disasters.<sup>20</sup> Nurses may need assistance in talking to their families about the role they will play in a disaster response, and leaders should help nurses structure conversations with their families concerning disaster participation. Decreasing nurses' worry about the safety of their family during a disaster can decrease their distraction during a crisis.

Nurses are one of the first providers to care for disaster victims and can evaluate psychosocial needs that may arise. In a study by Kihc and Simsek,<sup>16</sup> a psychological first-aid training guide was used to educate nursing students. Students who received the training showed an increase in self-efficacy for disaster preparedness compared with the control group. The researchers concluded that the training had a positive effect on self-efficacy for disaster preparedness, including the ability to handle psychosocial issues. Inclusion of psychosocial care for both rescuer and victim should be a standard in disaster training curriculum for nurses.

### ***Disaster preparation for nursing students***

Disaster content is not consistently covered in basic nursing education programs, especially in developing countries.<sup>5,12,23</sup> The AACN has endorsed the teaching of disaster preparation and included it in their core competencies for undergraduate and graduate nursing education document titled *The Essentials: Core Competencies for Professional Nursing Education*.<sup>4</sup> Incorporating disaster training into nursing education programs provides an opportunity for nurses in practice to partner with their peers in academia. Such partnerships will support student preparation for clinical practice and achievement of essential clinical skills.

A nurse's participation in disaster drills or an actual disaster increases their confidence to perform successfully in disasters.<sup>5,13,24,25</sup> During drills, students can participate as observers, act as victims, assist with triage, and help with the logistical coordination of the drill itself. When a disaster drill is scheduled, precepted students can observe in the ICC during the drill. Students can participate in mock phone calls, drill discussions, implementation planning, and later, a debriefing of the exercise. Schools of nursing and hospitals are encouraged to make student participation a routine component of drills that are scheduled in advance. Furthermore, nursing faculty members should represent their school of nursing as a participant on the disaster drill planning committee to provide scholarly information (including the latest evidence from the scientific literature), advocate for the school as a resource in actual disasters, aid with student engagement planning, and communicate disaster plan content back to faculty colleagues.

The AACN's Essentials document, or core competencies, states that entry-level professional nurses should be able to "Describe the health and safety hazards of disaster and public health emergencies."<sup>4</sup> The ICN's *Core Competencies in Disaster Nursing Version 2.0* states that a standard professional nurses should meet is "Describes approaches to accommodate vulnerable populations during an emergency or disaster response."<sup>8</sup> One approach to preparing nursing students to achieve these competencies is to develop curricula that engages them with the community. Shannon<sup>26</sup> described a community-based program requiring nursing students to complete a community assessment for disaster preparedness, including a disaster response. In addition, students developed and implemented educational activities for community members on topics of disaster preparation using seminars, social media content, and games.<sup>26</sup> Most hospital systems are required to complete a community assessment as part of their Medicare participation, and nursing students could be valuable partners in this work by assisting with data collection for disaster preparation.

Another teaching strategy to support nursing students' understanding of disaster preparedness is to have them review and analyze a hospital's disaster plan and participate in revising or updating the plan. To gain knowledge of the disaster planning on a macro level, students can use the Nonagon for Disaster Preparedness in Hospitals<sup>10</sup> conceptual model (see [Fig. 1](#)) to review a hospital's disaster plan. As they delve into the details of the plan, they will learn how each component of the plan works cohesively and identify the resources that will be needed for plan implementation.



Interprofessional education (IPE) in health curricula provides students with opportunities to learn the roles of other professions, practice communication with individuals in other professions, and collaborate during patient care. Establishing disaster drills in a simulation format is one type of IPE that has shown a measure of success.<sup>12,27</sup> Disaster drill simulations are held routinely and often involve hospital participants and local civic organizations (eg, city fire departments, county responders, military units). Nursing student involvement facilitates learning about disaster preparedness, interprofessional communication and collaboration, community resources that are available, and the local community disaster plan. Rotation of roles among participants during a simulation allows everyone to practice various skills with other professions and provides a comprehensive experience.<sup>27</sup>

Educational pedagogies commonly used to prepare nursing students (and practicing nurses) in disaster preparedness include online learning, didactic, independent learning, participation in disaster exercises, and blended learning.<sup>2</sup> Each of these approaches has been successful in increasing self-efficacy for disaster preparedness in students and practicing nurses.<sup>2,13,17,18</sup> A critical feature of disaster preparedness education is practice in application of nursing skills and knowledge in a stressful environment and under less-than-optimal conditions. Simulation has shown consistent success in achieving this goal, and disaster drill simulation exercises provide an experience that has an element of realism for the student to react to.<sup>28,29</sup> Computer software and hardware have advanced to a degree that they serve as effective platforms for disaster preparedness training as well as a useful tools to aid rescuers during an actual disaster event.

### ***Role of technology in disaster preparedness and actual disasters***

Nurse educators are challenged to provide engaging education and staff development in safe environments and flexible, accessible formats. Moreover, staff are challenged to find time to participate in educational programs because of critical bedside staffing needs. Incorporating the use of technology to deliver educational programs can resolve some of these challenges, especially when used for disaster preparedness training, as in the example using social media to provide disaster preparation content to emergency department staff nurses.<sup>15</sup> There are many benefits to using relatively simple forms of technology to deliver educational content, such as text messages, including limited human-to-human contact, no need for diverting staff from clinical care, no need for expensive equipment, and minimal overall cost.

More complex learning technologies are used in simulation to teach skills and competencies in disaster preparedness. Simulation is an effective tool for learning because it brings realism to the experience of skill acquisition for the learner, facilitating mastery of competencies under intense, adverse conditions.<sup>30,31</sup> Virtual reality or virtual simulation (VS) is a computer-generated environment in which learners interact with three-dimensional (3D) objects that appear real.<sup>32</sup> VS is used in other industries, including training by the military, aerospace, and airline industries.<sup>17,33</sup> VS offers important benefits to health care educators and leaders, adding value to teaching and learning through facilitation of skill acquisition.<sup>29,32,34,35</sup> Scenarios in VSs can easily be modified to fit educational objectives for a specific audience or skill. Unlike in-person drills that require significant planning, equipment, and funds to prepare and implement, VS scenarios are developed in a virtual world and can be changed more readily through programming. The disaster scenario scalability and complexity can be modified as the participant either gains competency or requires additional practice. In addition, participants can interact in the 3D virtual world through visual, auditory, and tactical senses, further enhancing the learning experience.<sup>18,33</sup> In contrast to



live disaster exercises, which are scheduled events usually involving only the staff working on a specific shift, VS exercises allow the greatest number of staff to participate at times convenient for them and their employer.

VS is overall less expensive compared with in-person training. A comparative cost analysis between virtual reality exercises used for disaster preparedness and traditional live exercises showed that cost savings by using VS were significant over time when compared with using live exercises.<sup>34</sup> VS requires significant monetary investment up front with purchase of hardware and software, but this investment is realized over time as the equipment lifespan is 3 to 4 years.<sup>34</sup> As VS technology continues to advance in its sophistication and capabilities, the benefits of VS will continue to overshadow remaining barriers for disaster preparation training. Nurse educators and nursing leaders should develop plans to move disaster preparedness education to the virtual world through VS.

Communication issues pose significant challenges (eg, matching victims needs with responders' resources) to effective disaster response at the time a crisis occurs.<sup>21</sup> In addition, getting information about the disaster itself (eg, reports of washed-out bridges, damaged buildings, power outages, people injured, location of recovery and relief centers) is important for both responders and victims. Leveraging technology through crowdsourcing is one strategy to mitigate these challenges. Crowdsourcing is defined as the use of technology by users to create and curate informational content, collaborating to add and update information primarily on a common communication platform.<sup>36</sup> Guntha and colleagues<sup>37</sup> summarized the positive role crowdsourced communications can play in disaster response to a flood. For example, using a centralized online system accessible to the public, requests for medical assistance, food and water, shelter, transportation, and medicine can be requested by victims through their mobile devices or home computers. Volunteers can access the system to list services, equipment, or supplies being offered. After reviewing all the crowdsourced information, disaster managers can match need with recovery effort. The authors also listed downsides to a crowdsourcing approach to disaster communication, such as disorganization of information, unreliable information, duplicated requests, and hoarding; however, as the technology continues to evolve, solutions to those challenges will likely be resolved over time.<sup>37</sup>

### ***Role of the nurse in technology-based solutions***

Nurses have a significant role when technology-based approaches to disaster training and management are used. First, beyond educating themselves on the platforms and contexts where they work best, nurses need to take an active role in educating the public. Nursing students can include information on crowdsourcing systems used in their community as part of their community teaching plans on disaster preparedness. Second, nurses need to know how to use crowdsourcing systems used in their geographical location as they themselves could be a victim of a disaster in their community and may need to use it. Third, health care leaders, including senior nursing leaders, could access the crowdsourcing systems to anticipate both short- and long-term community needs and begin preparations to meet those needs.

As technology continues to advance and become more sophisticated, it offers nurses certain benefits that are essential to preparation for disasters, such as cost-effectiveness, ease of use, mobility, time savings, communication enhancement, and reliability. The nursing discipline will need to embrace the use of technology as a means for safe, effective, low cost, timely education on disaster preparedness. In addition, nurses will need to use technology to manage actual disaster situations both in the short term and long term to plan for and meet the needs of their communities.

### ***Recommendations for Staff Nurse and Nursing Student Disaster Preparation***

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Disaster events are increasing worldwide, and the nursing profession must be in a state of continual readiness. The following recommendations are offered for nurse leaders and educators to improve readiness for disasters:

- Use a conceptual model (eg, Nonagon for Disaster Preparedness in Hospitals<sup>10</sup>) for hospital disaster plan development and nursing education curriculum development on disaster preparedness.
- Integrate short-term and long-term psychosocial aspects of care for victims and rescuers into disaster plans and education.
- Develop practice-academia partnerships by adding nurse educators to disaster preparedness committees for hospitals.
- Include first-aid training and triage to disaster preparedness education for both nurses and nursing students.
- Embrace a continual readiness approach to education by planning frequent, routine educational activities on the disaster preparedness plan, first aid, and disaster management.
- Involve nursing students in all hospital disaster drill exercises in the roles of both victim and participant.
- Engage students in community education on disaster preparedness.
- Use technology, such as VS, to deliver education on disaster preparedness and provide realistic training for nurses in unfamiliar contexts.
- Encourage community and hospital leaders to explore crowdsourcing technology for potential incorporation into disaster preparedness plans.

### **SUMMARY**

Humanity is facing an increasing threat to life and property due to an increase in disasters.<sup>1-3</sup> Disasters occur with little to no warning and can last hours to months or years. Nursing as a profession must be in a state of constant readiness to render aid as responders to disasters. Leaders must have a mindset of continual readiness and embrace a philosophy of staff and student nurse engagement in disaster plan development, review, and implementation. Educational and training programs should be regular, ongoing, easily accessible, engaging, and based on authentic conditions to deliver education and facilitate communication in actual disasters. The use of technology holds the substantial potential to strengthen disaster preparedness and should be incorporated into disaster preparedness plans.

### **CLINICS CARE POINTS**

- Disaster preparedness programs for staff nurses must contain an element of continuous education.
- Disaster preparedness for staff and nursing students should include basic first aid, triage management, disaster management, and organizational disaster plan content.
- Nursing leaders, faculty, staff, and students are partners in participation during hospital disaster drills and education.
- Nursing faculty and nursing staff should be regular members of hospital disaster preparedness committees.

- Virtual simulation should be embraced as a teaching strategy for disaster preparedness education for nursing students and staff nurses.

## DISCLOSURE

The authors have no disclosures regarding the support or work of this article or any of the works cited within. The three authors have no relevant financial or nonfinancial relationships to disclose.

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