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# Special Disaster Issue





Jessica Castner, PhD, RN, CEN, AE-C, FAEN, FAAN

e are preparing this special disaster issue of the Journal of Emergency Nursing (JEN) in the midst of the global coronavirus disease 2019 (COVID-19) pandemic. To date, the Centers for Disease Control and Prevention report that more than 590 health care personnel have died from COVID-19 in the United States alone, and there are likely many more owing to missing data.<sup>1</sup> As a professional community, we deeply grieve these tremendous losses of our valued and beloved colleagues and lift up their families in the US and around the globe. We pause to honor their lives, commitment, and sacrifice (Figure 1).



## FIGURE 1

A candle as a pause to honor health care personnel who have died from coronavirus disease.

Jessica Castner, Member, Western New York ENA Chapter, is Editor-in-Chief of Journal of Emergency Nursing. **ORCID identifier**: https://orcid.org/0000-0001-9889-3844. **Twitter**: @DrCastner

For correspondence, write: Jessica Castner, PhD, RN, CEN, AE-C, FAEN, FAAN, Castner Incorporated; E-mail: jcastner@castnerincorp.com.

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In addition to offering a sincere and heartfelt tribute to emergency nurses and other health care personnel who have lost their lives to COVID-19, the purpose of this editorial is to briefly relay a surge planning model<sup>2</sup> and the collection of all-hazard disaster manuscripts published in this issue of JEN. As the number of COVID-19 cases continues to rise with no approved or effective vaccine, we face unprecedented uncertainty on the continued impact of COVID-19 on our health care systems. Respiratory virus transmission and health care surges frequently occur in the fall after school-aged children typically return to classrooms and weather pattern changes result in more time congregated together indoors.<sup>3,4</sup> Although extensive preventative measures for the general public such as face masks, physical distancing, and limiting the number of individuals congregated together can limit virus transmission, it is prudent and reasonable to prepare for continued surges in COVID-19 infection presentations to the emergency department.

## Surge Planning Model

Effective continued ED pandemic disaster response depends on the preparedness and competency of every member of the team at every level and in every role as we care for patients and for each other. Anesi et al<sup>2</sup> published the framework entitled "An adaptable model for hospital preparedness and surge planning for emerging infectious diseases" in 2020 (Figure 2). The framework is briefly summarized here in this editorial, and the original manuscript is available as an open access publication for readers who wish to have more detail.<sup>2</sup> The figure is reprinted here as an important and timely tool for every member of the emergency care team to incorporate into their own professional preparedness, habits, teamwork, and mental or physical drills and reminders. Because patient crowding is a major and protracted problem in the emergency care specialty, emergency nurses are extensively familiar with the causes of health care capacity strain depicted in the framework as one or more of the following: increased patient volume, increased acuity, special care requirements, and resource reduction.<sup>2,5</sup> The framework provides a clever and easily memorized "4 Ss" of surge preparation for (1) space, (2) staff, (3) stuff, and (4) systems. Specific to staff, one of the key components of preparedness requires that staff are appropriately trained and have the needed competencies. The major theme of this JEN special disaster issue is all-hazard disaster competency and training for emergency nurses around the globe. Imagine how

preparedness would increase if every member of the emergency care team, at every level and in every role, reviewed the domains of focus (Figure 2, right column) and contributed to or felt ownership of disaster preparedness problemsolving ideas and actions within their scope of practice: case definitions, testing capability and logistics, personal protective equipment and isolation precautions, triage and cohorting, clinical protocols, staff health concerns and optout, clinician well-being, communication/coordination, surge planning, and scarce resource allocation.<sup>2</sup> The framework provides a useful mental model to address all of the listed domains of focus during acute surge (right column of Figure 2) to effectively respond to a patient volume surge of COVID-19 or other emerging infectious diseases.

# In This Issue

The editorial team is honored to contribute to supporting and elevating the specialty of emergency nursing in the midst of the COVID-19 pandemic with a special collection of all-hazard disaster content. This issue also contains a broad range of nondisaster manuscript topics. Here, I'd like to call the reader's attention to the manuscripts that address frontline nursing staff disaster preparedness and disaster competencies. Amberson et al<sup>6</sup> successfully delivered a 9-module ED-specific disaster preparedness curriculum. Rather than a didactic classroom approach alone, the authors used a creative, flexible, and pragmatic approach to deliver the educational material integrated into clinical workflow through daily huddles, staff meetings, staff emails, and a designated education board. The authors generously provided the curriculum and materials as online supplemental material for use in other settings.

Disaster response in the emergency setting includes stressful incidents that can threaten mental health and well-being. Addressing a low-frequency, high-impact event in the Trauma Notebook section, McCall explored the experiences of emergency nurses who cared for victims of a multiple casualty school shooting, psychosocial aftereffects, and lessons learned. Pallas<sup>8</sup> provided a new idea for professional peer social support by combining technical team debriefing and after-action with psychosocial peer support and referral interventions. The newly developed program was well received at the author's practice site and provides a promising novel emergency clinician peer support idea for further development and rigorous testing. The program manual is included as online supplemental content for replication in other emergency departments. Nicholas et al<sup>9</sup> refocus us on the mental health of patients and a contemporary disaster with an even broader scope and scale than the

current pandemic—climate change. The authors provided an overview of the key concepts for mental health impacts of climate change as an update for emergency nursing practice. Patient and clinician mental health and well-being are also major considerations in preparedness for infectious disease surges, and we welcome emergency clinician psychosocial intervention testing manuscripts in *JEN*.

An accurate baseline assessment of nurse disaster competency is essential to planning interventions that improve knowledge, skills, and perceptions on the topic. Marin et al<sup>10</sup> developed and tested a survey tool to measure general nursing disaster response competency. Readers can find references to 8 pre-existing surveys to measure nurses' knowledge, attitudes, and training in the manuscript's introduction. The newly developed survey was tested with nurses in southern Brazil on the basis of the International Council of Nursing's Framework of Disaster Nursing Competencies.<sup>11</sup> Further research and development are needed to address the limited perceptions of the disaster nurse's role in providing psychosocial support in addition to physical care. Extending our global perspective on disaster preparedness, Setyawati et al<sup>12</sup> assessed the knowledge, skills, and preparedness in 130 nurses in Indonesia. Their results replicated findings from similar studies around the globe, demonstrating only moderate disaster preparedness and a need for further preparation. The study by Setyawati et al<sup>12</sup> provides a special insight about the implications for interspecialty disaster preparedness professional development as the authors found no difference in preparedness among emergency, intensive care, and surgical unit nurses.

Nursing competency to respond to radiological or nuclear incidents includes distinct knowledge of disaster case identification, countermeasures, clinical protocols, infection control, decontamination, and further irradiation and contamination prevention. A study of emergency nurses by Bowen et al<sup>13</sup> reveals sobering knowledge gaps and a demonstrated need for specialty-wide professional development and training in radiological and nuclear incident response. The authors have provided the test they used in the study as part of the manuscript for readers to review, as well as a table of resources and links for independent professional development. One of the coauthors of this manuscript, Dr Goodwin Veenema, has also authored and edited the definitive textbook for disaster nursing, which provides an excellent educational resource for nurse educators and emergency nurses seeking further information.<sup>14</sup> As emergency clinicians prioritize developing and improving their own preparedness for nuclear and radiologic events, there is also a need for injury prevention and discharge education to address the lack of household preparedness. In an annual survey conducted by the US Federal Emergency Management Agency in 2018,



#### FIGURE 2

A conceptual and adaptable approach to hospital preparedness for acute surge events caused by emerging infectious diseases.<sup>2</sup> Health care capacity strain occurs owing to increased patient volume, increased patient acuity, special patient care demands, and/or resource reduction. Preparedness and response strategies to combat acute surge events must address the "4 Ss": space (beds), staff (clinicians and operations), stuff (physical equipment), and system (coordination). ICU, intensive care unit; PUI, patient under investigation; PPE, personal protective equipment. Reprinted with permission from Wolters Kluwer.

nuclear explosive events were listed as the lowest levels of household emergency planning (42%), followed by earthquake (43%) and flood (47%).<sup>15</sup> Emergency nurses are well poised to address this planning and knowledge deficit through injury prevention programs, community outreach work, and patient education.

Only 12% of US households have all recommended supplies, evacuation plans, and communication modalities

recommended for all-hazard disaster preparedness.<sup>16</sup> Ready.gov, a US Homeland Security website provides allhazard education and household disaster plans that can be provided to patients as part of patient education. The information is also useful for emergency clinicians to develop their personal household readiness plans and obtain supplies.

The COVID-19 pandemic resulted in rapid adoption and expansion of telehealth to improve social distancing and reduce viral transmission risks for nonurgent patients. A systematic review of the published literature by Nejadshafiee et al<sup>17</sup> reveals a surprising gap in evidence about telenursing in incidents and disasters. The authors highlight the priority need to disseminate novel telenursing models and feasibility, as well as research the efficacy and comparative effectiveness of telenursing compared with usual emergency care. *JEN* continues to welcome manuscripts on general telehealth and telenursing interventions. Furthermore, pandemic planning must include the potential to administer COVID-19 vaccines in the emergency department, once a vaccine is available. Although Ozog et al<sup>18</sup> did not study attitudes toward COVID vaccination, their study on health care provider attitudes toward an influenza vaccination in the emergency department has important and timely implications for the current pandemic. Most clinicians supported nurse-initiated protocols to enhance the efficiency of vaccine administration, as most were vaccinated themselves (91%) and were in favor of providing vaccination interventions (86%) when staffing and resources were sufficient for overall ED flow and function.

In summary, I wrote this editorial to honor the lives of our health care provider colleagues who have, sadly, succumbed to COVID-19, provide a brief overview of a surge planning framework with immediate clinical implications, and briefly introduce the collection of all-hazard disaster manuscripts in this issue of *JEN*. In addition to individual household preparedness resources at Ready.gov, several of the manuscripts and online supplemental content include resources that can be immediately translated into education and practice.<sup>6,14</sup> It is a distinct privilege to disseminate this and all the material in this issue to support and lift up the specialty of emergency nursing as we confront, draw together, and overcome in these challenging pandemic times.

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