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A Humanitarian Obligation to Educate Nurses in Disaster Response

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The ongoing and increasing global threats of terrorism, natural and man-made disasters, and pandemic vulnerabilities means that nurses in every discipline must possess the knowledge to safely and effectively respond to an incident. From emergency rooms to community clinics, nurses play an integral role in a disaster response; yet, they are often unprepared to respond to the complex consequences of disasters. Most nurses feel an innate responsibility to respond but feel ill-prepared to do so. As a profession, nursing has an ethical and humanitarian responsibility to incorporate evidence-based disaster education in nursing curricula to ensure that future nurses possess the knowledge and skills to respond to local, national, and global incidents.

The literature provides unequivocal evidence that nurses globally are unprepared, or not confident, to respond to a disaster and nursing curricula are often deficient of evidence-based disaster content. The compilation of these two entities hinder nurses from effectively responding to disasters. While evidence exists of disaster education being implemented in nursing programs, no disaster content is all encompassing and required as evident at Shenandoah University. To ensure future nurses possess the knowledge to provide skilled and humanitarian care to individuals, families, and communities affected by a disaster, comprehensive disaster education must begin in nursing programs.

In 2005, the faculty in the school of nursing recognized the increasing number of disasters that included the 911 terrorist attacks, anthrax cases, Oklahoma City bombing, hurricane Katrina in addition to tsunamis, earthquakes, and many natural disasters. They recognized the limited education nurses receive related to disaster preparedness and response. As a result, the school of nursing established, and continues to offer, disaster courses throughout the nursing curriculum. A three-credit emergency and disaster preparedness and response course was developed and implemented and sustained in the undergraduate curriculum. For the last 13 years the course has been consistently offered twice a year as a required class for all senior nursing students. About 150 students graduate annually with comprehensive foundational knowledge of emergency preparedness and disaster nursing. The goals of the program are to enable students to transition into nursing practice with basic disaster knowledge and skills to effectively and safely respond to an incident; understand the importance of collaborating with other agencies throughout the disaster cycle; and ensure graduating nurses are personally prepared for a disaster so they can report to work when called upon. Since its inception, over 2,000 nursing students have taken the course, acquiring foundational disaster knowledge that better prepares them to respond to an incident.

The success of the undergraduate program, and the need for advance disaster knowledge, contributed to the development and implementation of two graduate level disaster courses. At the master's level, students have the option to take an online disaster course as an elective. The course focuses on assessment, diagnosis, and treatment of patients affected by different types of disasters, i.e., chemical or biological warfare, crush injuries related to earthquakes, etc. At the

post graduate level, Doctor of Nursing Practice (DNP), students may take an online emergency preparedness course that centers around incident management and leadership roles of healthcare administrators throughout the disaster cycle.

A multitude of innovative pedagogical approaches to teaching the disaster courses are used. Strategies include, but are not limited to, theoretical analyses, tabletop exercises, interactive activity, video-based discussions, disaster drills, simulations, and virtual reality (VR). The use of virtual reality integration provides the students with near reality experiences that provide the participant with stress inoculation of a what a real disaster experience might be like. Most recently, in collaboration with community partners, specialty trainings were added to the undergraduate disaster curriculum. Specialty trainings include *Stop the Bleed*, a training to control severe bleeding, and *Revive!* for the administration of naloxone for recognizing and treating opioid overdose in the community.

The disaster content presented in these courses fulfill expected program outcomes set forth by the nursing accrediting organizations. The undergraduate courses prepare students for NCLEX licensure and the graduate courses prepared students to take the Advanced Practice Board Certification Exam in disaster related topic areas (American Nurses Credentialing Center, 2016; National Council of State Boards of Nursing [NCSBN], 2016). Disaster knowledge is imperative for every nurse and disaster education begins in every nursing program.

Nurses who are not prepared for disasters are less willing to respond to an incident when called upon. The lack of available nurses has the potential to create a cascading effect that negatively impacts the health and well-being of populations and communities.

Title:

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References:

Aliakbari, F., Bahrami, M., Aein, F., & Khankeh, H. (2014). Iranian nurses' experience of essential technical competences in disaster response: A qualitative content analysis study. *Iranian Journal of Nursing and Midwifery Research*, 19(6), 585-92.

Alim, S., Kawabata, M., & Nakazawa, M. (2015). Evaluation of disaster preparedness training and disaster drill for nursing students. *Nurse Education Today*, 35(1), 25-31. doi:10.1016/j.nedt.2014.04.016

American Nurses Credentialing Center. (2016). Family nurse practitioner certification. Retrieved

from <https://www.nursingworld.org/~4acd24/globalassets/certification/certification-specialty-pages/resources/test-content-outlines/familynp-tco.pdf>

Baack, S., & Alfred, D. (2013). Nurses' preparedness and perceived competence in managing disasters. *Journal of Nursing Scholarship*, 45(3), 281-287. doi:10.1111/jnu.12029

Bulson, T., & Bulson, J. A. (2011). Nursing process and critical thinking linked to disaster preparedness. *Journal of Emergency Nursing*, 37(5), 477-483. doi:10.1016/j.jen.2010.07.011

- Diab, G. M., & Mabrouk, S. M. (2015). The effect of guidance booklet on knowledge and attitudes of nurses regarding disaster preparedness at hospitals. *Journal of Nursing Education and Practice*, 5(9), 17. doi:10.5430/jnep.v5n9p17
- Evans, C., & Baumberger-Henry, M. (2014). Readiness: How Prepared Are You? *Journal of Emergency Nursing*, 40(5), 448–452. <https://doi.org/10.1016/j.jen.2014.03.006>
- Jose, M.M., & Dufrene, C. (2014). Educational competencies and technologies for disaster preparedness in undergraduate nursing education: An integrative review. *Nurse Educator Today*, 34, 543-551.
- Kenner, C. A., & Pressler, J. L. (2014). Developing a culture of emergency preparedness education in nursing. *Nurse Educator*, 39(1), 1-3. doi:10.1097/NNE.0000000000000003
- Nash, T. J. (2015). Unveiling the truth about nurses' personal preparedness for disaster response: A pilot study. *Medsurg Nursing: Official Journal of the Academy of Medical-Surgical Nurses*, 24(6), 425.
- Nekooei Moghaddam, M., Saeed, S., Khanjani, N., & Arab, M. (2014). Nurses' requirements for relief and casualty support in disasters: A qualitative study. *Nursing and Midwifery Studies*, 3(1), 1-8.
- Tillman, P. (2011). Disaster preparedness for nurses: A teaching guide. *The Journal of Continuing Education in Nursing*, 42(9), 404-408. doi:10.3928/00220124-20110502-02
- Veenema, T., Griffin, A., Gable, A., MacIntyre, L., Simons, N., Couig, M., Larson, E. (2016). Nurses as leaders in disaster preparedness and response: A call to action. *Journal of Nursing Scholarship*, 48(2), 187-200.
- Wilkinson, A. M., & Matzo, M. (2015). Nursing education for disaster preparedness and response. *Journal of Continuing Education in Nursing*, 46(2), 65-73. doi:10.3928/00220124-20150126-01

Abstract Summary:

Nurses possess a humanitarian drive to respond to disasters. However, nursing education does not always include disaster content in the curricula, thereby limiting nurses' knowledge of disasters response. Requiring evidence-based disaster education in nursing programs contributes to nurses responding for their employers or volunteer partners such as the Red Cross.

Content Outline:

1. **Introduction**
1. Created and implemented a required 3 credit disaster course in the curriculum for all senior nursing students.
2. **Discuss the significance of integrating evidence-based disaster education into the nursing curriculum.**
 1. Provide evidence as to the increasing number of disasters.
 2. Describe how nurses make up the largest segment of the healthcare workforce in the United States and provide evidence as to how they are inadequately prepared to respond to disasters.
 3. Provide examples of how nurses in every discipline are integral to a disaster response.
 4. Explain that disaster content fulfills program outcomes and licensure expectations.

2. **Examine innovative pedagogical approaches of disaster education across the nursing curriculum.**
 1. Discuss various pedagogical approaches to teaching disaster content:
 1. Didactic
 2. Tabletop exercises/interactive activity
 3. Video based discussion, i.e., Contagion
 4. Simulation
 5. Virtual Reality Technology
 2. Describe technological resources:
 1. Apps
 2. Evidence-based electronic resources (i.e., CDC, WHO, etc.)
 3. Describe Community Collaboration and Partnership
 1. Drills
 2. Stop the Bleed
 3. Revive! Training (Naloxone)
 3. **Articulate the importance of nurses developing a personal/family disaster plan and kit.**
 1. Nurses who are not prepared for disasters are less willing to respond to an incident when called upon. The lack of available nurses has the potential to create a cascading effect that negatively impacts the health and well-being of populations and communities.
 2. Briefly describe the components of a personal disaster plan and kit.
 4. **Conclusion**
 1. Educated over 2,000 nursing students to enter the workforce prepared with the foundational knowledge to respond to disasters.

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Author Summary: Dr Smith was an emergency department nurse and nurse educator for more than 30 years. She developed the disaster courses at her nursing school and is a contributing author for Designing and Integrating a disaster preparedness curriculum: Readyng nurses for the worst. She has written and frequently presented on this topic. She was recently recognized by SREB with a 2018 Pacesetter Award for SU School of Nursing for their disaster nursing education program.

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