

# Healthcare Disaster Response

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### INTRODUCTION

The goal of healthcare is to save as many lives as possible. In disaster situations, untrained staff and ill prepared members of the community can lead to a decrease in vitality as well as an abundance of waste of valuable resources. Disaster Nursing is a relatively new specialty in which nurses are confused about their roles (Manal et al., 2020). Continuing education is a part of nursing and to prevent confusion, nurses should participate in various disaster simulations within their hospital systems. "A Mass Casualty Incident (MCI) is an event in which the number of patients exceeds the resources normally available from local resources" (Binkley&Kemp, 2021). Healthcare professionals should have prior education in MCI's to better prepare for the unpredictable. Disaster triage is used to prioritize patients so scarce resources can be optimized (Binkley&Kemp, 2021).

### SIGNIFICANCE

- The COVID-19 Pandemic has 504,079,039 Globally Confirmed cases ("COVID-19", 2022) and 6,204,155 Global Deaths: ("COVID-19", 2022). Both Hurricane Laura and Hurricane Sally together caused a total of 47 Deaths, \$26.3 Billion US (Smith, 2021)
- During a 2020 study, four untrained groups (civilians without life support training) were unable to arrive at a solution (Atrial Bleed Control) before the eight-minute cutoff. The four trained groups took an average of 3 minutes and 33 seconds to stop the bleed (Bobko et al.)
- During a Pre-Survey, only 15% of untrained civilians recognized 'Trauma' as the number one cause of death in the US between ages 1-44 (Bobko et al.)

### POSITION STATEMENT

Healthcare systems and their workers are unprepared for largescale disaster management within communities. An increase in disaster education in both civilians and medically trained professionals will help role designation and decrease confusion in MCI's. Along with this, improving triage skills can save lives and optimize the use of scarce resources.

### SUPPORT FOR POSITION

MCI's create a short-term surge of demand for resources. However, the COVID-19 pandemic has proven that incidents can last longer than previously thought, further depleting materials (Binkley& Kemp, 2021). An increased demand in resources requires a higher level of nursing knowledge for disaster management. "Interprofessional education (IPE) is critical in preparation for a disaster when the roles of individuals may necessarily change to accommodate surge capacity (the sudden, unanticipated demand for health care)" (Veenema et al., 2017)

"More effort must be made in the academic and clinical fields to enhance the development of this specialty" (Manal et al., 2020).

- In a 2020 study, four trained groups (First Care Provider model) had an average of 32.6 seconds compared to the 7 minutes and 3 seconds four untrained groups took to prevent airway aspiration (Bobko et al.)

The aftermath of various disaster events necessitates nurses to be educated in disaster preparedness within emergency response, due to critical care needs. (tsunami's, earthquakes) (Veenema et al., 2017)

### IMPLICATIONS FOR PRACTICE

Healthcare systems should provide adequate disaster education to nurses, staff, and civilians to lessen the confusion among roles. "Nurses and midwives are recognized worldwide as healthcare providers who deliver the majority of health care and are essential to improving health outcomes" (Veenema et al., 2017). Preparation for MCI's is essential to ensure the best possible outcomes (Binkley&Kemp, 2021). The best way to educate nurses is by starting early, in undergraduate programs. Within schools of nursing, a national guideline for Disaster Response needs to be established to better promote correct training and standardization of care (Veenema et al., 2017). Civilian education is also important for positive health outcomes in MCI's. Civilian medical care is a proposed call to action due to their impact in various recent disasters (Bobko et al., 2019). Finally, there must be a balance between over and under triage for the maximum quantity of lives to be saved. Under triage is when the severity of a patient is not recognized, and over triage can lead to a depletion of resources and staff; both incidences increase mortality (Binkley&Kemp, 2021).



(Addario, 2020)

### CONCLUSION

To be better prepared for disasters, the United States healthcare system demands an increase in disaster education (including First Care such as Stop the Bleed models) and triage care. This is especially important for those in the nursing field because they will be the ones providing immediate hands-on care. Nursing education must start early in undergraduate programs to promote the best possible outcomes and lessen anxiety among roles.

The general public should also be trained in recognizing and preventing basic life saving strategies since they are on scene before emergency response.



(Frenkel, 2022)

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