A COMMUNITY BASED DNP LEADERSHIP CURRICULUM FOR INTERDISCIPLINARY GLOBAL DISASTER PREPAREDNESS

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Located in one of the 5 Boros of NYC on the old Cunard shipping estate overlooking Brooklyn and Manhattan. We stood and watched the 2 WT Centers fall.

Noted for its Civic Engagement philosophy; Community Partnerships; Service and Experiential Learning Communities taken by all students.

RN-BS cohort currently becomes disaster certified in an elective course taught by a member of NY Emergency Personnel.

Students volunteer in disasters locally and globally on interdisciplinary teams.

DNP for FNP’s will have a focus on disaster preparedness, leadership, and caring for populations as primary care providers.
Disaster Management (The specific plans that designate a particular community response)

- Why is this important to plan our curriculum around?
  - In the history of the world disasters (Natural and Man-made) have been occurring.
  - Since 2001, there have been in the United States and the World many disasters of severe magnitude causing thousands of lives lost and deeply affected by the aftermath of the disasters.
  - Much waste has occurred in resource management to mitigate damage along with individual harm in the resulting aftermath that constructively can be changed.
Disaster Management Roles

- 1881-Red Cross, Clara Barton
- CDC (under DHHS)
- 1979- Federal Emergency Management Agency (FEMA)
- 1989- International Association of Emergency Managers (IAEM)
- 2007- NONPF Competencies for APRN / NNEPI
- Local Medical Reserve Corps and First Responders; Hospitals
- National Guard
- Salvation Army
- Community
Recent Major Disasters in the US

- Andrew 1992 (Category 5 Hurricane) 26 direct deaths and 40 indirect deaths
- September 11, 2001, 2,996 deaths (man-made)
- Katrina August 29, 2005, 1,836 deaths (Category 5 Hurricane)
- Tornados Midwestern 2011, 348 deaths (multiple states)
- Sandy October 29, 2012, (Hurricane and post-tropical cyclone) 117 deaths (U.S.)
World Disasters

• North Sea Flood Disaster 1953, over 2,100 lives lost
• Indian Ocean earthquake and tsunami in 2004 affecting 10 countries, 230,000 lives lost.
• Earthquake 2005 Kashmir, Pakistan, 87,350 lives lost in earthquake and 39 lives lost to tetanus bacterium infections.
• Earthquake 2010 Haiti, 314,000 lives lost in addition to 6,631 deaths to cholera outbreak after the earthquake (CDC).
• Earthquake/Tsunami 2011 Japan, 19,000 lives lost; nuclear contamination.
Local Types of Disasters in Communities:

- Bioterrorism
- Other acts of terrorism
- Epidemics and pandemics
- Earthquakes
- Floods
- Fire and explosions
- Water and food contamination
- Power outages
- Chemical spills
- Hurricanes and tornados
- Infrastructure damage
DNP Curriculum in Disaster Management – Our Recent Experience in the NYC metro area

• Local disasters of great magnitude
  • Sandy - 2012 devastating storm that affected our local communities and our vulnerable populations, predictions underestimated and therefore evacuation response delayed.
  • Loss of electricity and water for days, food supply disrupted, no means of communications among local officials, immediate need for shelter not met, no gas for cars, loss of employment, present health related issues, lack of operation of many hospitals and ERs; great infrastructure lose.
  • Local individuals felt FEMA out of touch with their needs, locals caring for each other with the help of volunteers.
  • Need for Satellite phones and generators not met nor expected.
  • September 11, 2001 - most devastating man made disaster (terrorism) on U.S. soil. Affected our local communities and individuals of all ages.
  • High death toll, post traumatic stress syndromes, mental illnesses, loss of employment, long term chronic illnesses and rare cancers.
Areas Needing Great Attention

- Communication
- Immediate Resource Equipment for Medical and Volunteer Personal to Prevent Long Term Illness
- Coordinated Leadership on All Levels
- Pediatric Identification
- Educate and Train First Responders for Children (this includes teachers, child care personnel, Grandparents and Parents)
- Mental Health Resources Readily Available to All Age Groups (different ages have different needs)
- Sustained Community Awareness of Disasters and Response
- Identifiable Caregiver Roles for Elderly and Disabled
- Public Relations (especially government and local agencies)
- Utilizing Locally Based Higher Education Resources
What have we learned?

• Even with our long history of man made and natural disasters there continues to be many areas of disaster management that need to be addressed and improved.

• Interdisciplinary relationships and coordination of disaster planning (pre) planning and preparedness phase, (during) response phase and (after) recovery and evaluation phases should be the focus of disaster management among professionals in communities, locally and abroad.

• This will be a major focus of a DNP curriculum in disaster management in order to serve our communities better in times of need, with the goal of improving outcomes in emergent conditions and saving lives and infrastructure for populations served.
Focus of DNP Curriculum

• Disaster response for all disasters begins at the local level and communities must be prepared for future catastrophic events.

• Focus of a DNP curriculum in disaster management will be on health care disciplines and their interdisciplinary relationships, along with leadership and co-ordination on these teams to mitigate harm.

• Education and simulations are the best ways to prepare health team members and populations for manmade or natural disasters.
Theoretical Frameworks

1) Social Constructivist Learning Theory
2) Servant Leadership
3) Systems Models
4) Ethics of Triage / Utilitarianism
5) Other Leadership Models
6) Inter-professional education models
DNP Curriculum in Disaster Management

• Each course will be centered on defining and anticipating future disasters, their risks, their impact on the communities and the history of how communities handled types of disasters in the past.

• Identifying the vulnerable populations in the communities to assess, plan, and deliver rapid response to all types of disasters (man made and natural) – how are they cared for during and after disasters.

• Develop educational programs and materials needed to teach communities to handle emergencies, train members in PTSD and intervention.
DNP Curriculum in Disaster Management

- DNP courses will implement leadership interdisciplinary relationship models into their course outlines and understand national and local models and infrastructure.

- DNP courses will implement coordination with local and state officials to improve disaster management in the communities, especially preparing vulnerable populations for evacuation or mitigation of harm and simulating responses.
Areas of Study to be Implemented into Disaster Management DNP Curriculum

- Areas of study to be included into disaster management and interdisciplinary coordination
  - Epidemiology
  - Evidence Based Practice
  - Infectious Diseases and Bioterrorism
  - Public Health Practices / Ethics of triage
  - Organizational and Systems Collaborative Leadership
  - Information Systems Technology
  - Systems Approach to Disaster Preparedness, Locally and Abroad
  - Promoting Health, Healing, and Hope, Post Recover
  - Establishing Policies and Financial Needs for Disaster Management
  - Global and States Nursing Practices and regulations (e.g., nursing licensure without borders) and Policy Development
Negotiating Relationships (the importance of leadership)

1) NGO’s (nongovernment organizations) and Community Leaders
2) Levels of students and volunteers
3) Teams and team members / power issues
4) Focusing on the job at hand and safety
5) Debriefing and rebriefing morning and evening.
DNP Curriculum in Disaster Management

DNP Capstone Projects – One primary focus will be around researching existing disaster preparedness programs for communities that are currently in place, implementing improvement of existing disaster management programs and providing recommendations for future disaster management in communities locally and abroad.

The NP Leader – May study previous epi centers, such as, hospitals gravely affected in Katrina, Sandy or Haiti, and develop models with policies for disasters and for the mitigation of harm. Practice regulations should be part of the analysis, as should systems coordination. Can simulations translate into action for a better response among inter-professional team members?
Outcomes (Sharing of Findings)

1) E-B Reporting of lessons learned on global and local field trips with resulting articles and/or policy (Haiti, Katrina, Sandy).
2) Biennial Disaster Leadership Nursing Conference to share models and research.
3) Planned work with inter-professional curriculum model development.
References

- Cole and Connell’s, “Local Planning for Terror and Disaster from Bioterrorism to Earthquakes”
- Dass-Brailsford, “Crisis and Disaster Counseling: Lessons Learned from Hurricane Katrina and Other Disasters”
- HP 2020, “All Hazards Preparedness”
- NNEPI, “APRN Education for Emergency Preparedness and All Hazards Response”
- Phillips and Webb’s, “Introduction to Emergency Management”
- Veenema’s, “Disaster Nursing and Emergency Preparedness”