Regional Assessment of Disaster/Emergency Preparedness among Registered Nurses in the Washington Metropolitan Region

Dr. P.J. Maddox
George Mason University

Research Objective: The purpose of the study was to determine registered nurses' preparedness to respond in major disasters and emergencies in order to inform regional planning and capacity building for disaster response in the Washington DC Metropolitan Region. The objective of this study was to identify the learning needs, perceived competence and training experience of registered nurses (RNs) as early responders during large-scale, all hazards emergencies.

Need for the Study: With recent community disaster experiences and apparent system failures, the need to ensure that nurses and other healthcare professionals are prepared to function in community disasters and emergencies has become an important priority for public health leaders, health systems, professional schools, and policy makers alike. This study was designed to obtain information on RN learning needs and perceived competence; to identify the adequacy of institutional education/training in various sectors and settings and to identify persistent gaps in RN's disaster response knowledge and skills affecting community disaster/emergency response capacity.

Study Design/Participants: The first phase of the research involved data collection was a baseline survey (fall of 2004) of registered nurses (n-230) licensed in the metropolitan Washington, DC region (Washington DC, Virginia and Maryland) to obtain RN perceptions about their competence and learning needs relative to nationally recognized competencies for emergency preparedness and disaster response. An on-line survey of nurses' utilized a researcher developed instrument based on competencies promulgated for nurses, health professionals and first responders from a variety of nationally recognized sources.

The second phase of the research involved qualitative data collection through a series of regional focus groups (7) held in the fall of 2005. The purpose of focus groups was to better understand current training activities and levels of readiness of institutions within the metropolitan Washington, DC region among employers of nurses in various sectors/settings (hospitals, long-term care, assisted living, school health, public health, home health, and community settings). Deductive qualitative coding methods were used to identify major themes. Findings from focus groups informed and clarified findings derived from the on-line survey.

Principle Findings:
- Almost all disaster response competencies were reported by RNs participating in the study as important.
- Less than half reported high levels of competence in specialized knowledge and skills: recognizing biological, chemical radiological agents, emergency handling/treatment, psychological management of massive victims of a disaster, using protective equipment, public health reporting, and knowledge of responders outside their organization.

- With the exception of RNs having served in the military, few reported having any hands-on or interdisciplinary team drills.

Conclusions:

- Hospital based nurses reported knowing about the existence of a disaster plan that would be implemented by their employer, but few report any knowledge of inter-agency/organizational plan coordination or knowledge about disaster specific knowledge and skills.
- Nurses who work more in community based settings (i.e. occupational health, school health) and within government agencies were more knowledgeable about specific aspects of their organization/agency's response plan and were more likely to report having participated in role specific exercises.
- Nurses from all health sectors and settings reported less confidence than their employer about the comprehensiveness, readiness and adequacy of institutional response plans.

Implications for Policy, Education and Practice:

- Performance goals/competencies are needed (degree or level of mastery) that are specific to RN role and service setting.
- Just in time, realistic, scenario-based and interactive, hands-on training is urgently needed.
- Findings from this study have implications for curriculum planning for undergraduate, graduate and continuing education programs for nurses for individuals planning regional/community disaster.