

Effects of Violence in a Community during a Disaster—Recommendations to Strengthen Forensic Services

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Introduction: The response of nurses to disasters is documented in several areas including trauma, public health, and education. There is a lack of evaluative literature pertaining to sexual violence and interpersonal violence. This presentation will inform attendees about the effects of disasters on victims of sexual violence, and prepare Sexual Assault Nurse Examiner teams and emergency department nurses to incorporate forensic evidence collections services to victims of violence in prevention efforts during disaster planning.

Methods: A systematic review of the literature was conducted to study the effects of disasters on sexual violence in a community. Collaboration among rape victim advocacy, law enforcement, emergency medicine, and prosecution identified the need for a multidisciplinary approach to the prevention of and treatment for victims of sexual assault and interpersonal violence.

Results: The search strategy captured the following topics: domestic violence, sexual assault, and rape. Documents were screened and professionals in the field were contacted in order to augment the findings.

Conclusions: Disasters create widespread destruction to community infrastructure. The effects increase the risk of violence and pose difficult situations for individuals residing in disaster-stricken areas. The lack of services in the aftermath necessitates improved planning and preparedness for communities to screen for victims of violence, establish access to healthcare records, preserve forensic healthcare documentation and evidence, and coordinate services for victims of violence.

Keywords: community; disaster; disaster health; disaster management; forensic; multidisciplinary; prevention; sexual violence

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Partnering with Faith-Based Organizations during Disasters

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Introduction: There is a long history of faith-based organizations (FBOs) responding to disasters around the world. Their services supplement governmental and non-governmental services including basic public health needs of food, water, shelter, and clothing. After hurricanes Katrina and Rita in the United States, FBOs provided essential services (sometimes the only services) received by victims of the storms.

Methods: This was a mixed methods design. Qualitative methods included ethnography (where the researcher became a member of a FBO volunteer team for one week in New Orleans) and phenomenology (interviews with staff, volunteers, and those receiving FBO assistance). Quantitative methods included administration of the

Impact of Event-Revised Scale (IES-R), the Herth Hope Index (HHI), and the Hope Visual Analogue Scale (HVAS). **Results:** Results were consistent across participant groups. The need to offer or receive assistance was perceived as divinely led and the first step in FBO disaster response. Participants experienced loss and emotional pain. They came together as strangers and left as family. In the process, their lives were changed. They mentored and were mentored, viewed themselves as being blessed, and desired to express their gratitude. They wondered about each other and the future. The IES-R scores indicated significant post-event stress; the HHI and the HVAS demonstrated the presence of hope.

Conclusions: Individuals and communities were impacted by FBO services. Relationships were based on mutual respect, dignity and trust. Clinicians likely will interact with FBO staff and volunteers. Primary, secondary, and tertiary prevention can be initiated when FBO disaster response is understood.

Keywords: disaster response; faith-based disaster response; Hurricane Katrina; non-government organization disaster response, partnerships

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Management of the Dead during Disasters—Role of First Responders in South Asia

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The effective intervention of government agencies to manage casualties in the immediate aftermath of a disaster often is restricted by many technical and circumstantial factors. However, during the last decade, it was observed that during any type of disaster, volunteers from the affected and surrounding communities form a huge supportive force to perform the most urgent tasks, including managing the dead. This was witnessed in the countries affected by the 2004 tsunami. Currently, these non-skilled first responders play a vital role in managing mass casualties during the immediate post-disaster phase of major disasters occurring in south Asia.

The management of the dead during disasters is a time-consuming, multi-disciplinary, multi-stage task. It is a medico-legal emergency that should be commenced during the immediate post-disaster period. First responders comprise an easily accessible, readily available task force for managing the dead, especially by recovering and transporting the bodies.

The first attempt to regulate the first responder's role in disasters was made in 2005 and was based on the post-tsunami experience through a joint effort of many international organizations. Since then, south Asian countries are more concerned about developing the capacity of first responders via community-based disaster management schemes. India already has prepared its own guidelines for first responders involved in managing the dead during disasters.

The services provided by first responders could be enhanced greatly by training and close supervision through integrated mass-casualty management plans in developing countries.

Keywords: Asia; dead bodies; disaster; disaster management; first responders

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Disaster Needs Assessment Teams: Recent Experiences in Australia

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Introduction: Historically, Australia has relied on the Australian Defence Force to provide overseas medical assistance, including early disaster needs assessment. The need for small, rapidly deployable disaster needs assessment teams has been highlighted from experience gained from deploying civilian medical teams to Maldives and Banda Aceh after the 2004 tsunami; Yogyakarta after the 2006 earthquake, and aircraft crash in 2007; and to Mumbai after the bombings in 2008.

Methods: In previous disaster responses, the selection and preparation of these teams have been *ad hoc*, depending on the availability of suitable people to deploy. The Western Australian Department of Health, as part of its piloting of Australian Medical Assessment Teams (AUSMATs) development, has identified the need, composition, preparation, and training required for these small teams on a national basis.

Results: This presentation will examine the need, requirements, and development of these assessment teams; their communication role in the early stages of a disaster response and their role in facilitating the deployment of appropriately tasked, equipped, and trained Australian medical teams to assist in the disaster response. Recent deployments to Yogyakarta and Mumbai have illustrated the issues encountered if these teams are utilized.

Conclusions: The further development of these teams nationally is an ongoing focus. It is anticipated that a number of these teams will be prepared and ready to respond by the end of 2009.

Keywords: Australia; disaster health management; disaster needs assessment teams

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Creating an Advanced Medical Assistance Station for the Emergency Medical Assistance Service in French Guiana

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Introduction: French Guiana is a sparsely populated French department in South America. Ninety percent of its territory is covered with dense, equatorial rainforests. Medical teams constantly are confronted with difficulties concerning access for emergency services and telecommunications.

Methods: The Emergency Medical Assistance Service of French Guiana (SAMU973) is working with the French

National Spatial Agency and Thales-Alenia-Space Company to develop a high-tech, autonomous tool for tropical environments that can be deployed easily in disaster areas or isolated regions.

This unit, known as the Advanced Medical Assistance Station (PSMA) comes in a form of a freight container that can be transported by land, sea, or air, and contains communications equipment (tactical radio communications network, satellite dish, and computerized videoconference equipment) and peripheral applications that can be installed easily by a small, autonomous team.

Results: After being tested using three simulations in an isolated area, the PSMA demonstrated its efficiency for reconnaissance missions. It also can be used to coordinate the emergency medical chain and support medical teams operating field hospitals during longer missions. This is done using its communications networks, portable telemedicine unit for triaging and monitoring victims, and system for identifying and monitoring large numbers of patients (using barcodes).

Conclusions: The final results will provide French Guiana and the SAMU973 with an efficient disaster management facility able to withstand tropical conditions that is easy to deploy when aiding disaster victims.

Keywords: disaster management; French Guiana; isolated areas; medical care; transmission; triage

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Replication of a Study on Disaster Myths among Students in a Graduate Course on an Introduction to Emergency Preparedness and Disaster Health

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Introduction: Recently, de Goyet, Alexander, and Auf der Heide each have written on “disaster myths”. Alexander presents disaster myths as “propositions” and used them in a study to ascertain an understanding of these myths by students in Europe. Auf der Heide used an evidence-based approach to develop a similar list of myths. The purpose of this study was to explore the understanding of myths by two groups of Australian graduate health professionals.

Methods: Alexander's 19 propositions on disaster myths were replicated in a similar questionnaire. A further seven propositions from Auf der Heide were added. The questionnaire was distributed on two occasions to two groups of graduate health professionals undertaking the introductory unit in a Graduate Certificate in Emergency Preparedness and Disaster Health. The first occasion was during the first session in the course. The second was during the last session of the course, without any specific feedback on the outcomes of the first attempt.

Results: The means for all propositions for both groups of students in the initial attempt were in the “neutral” or “agree” range, while they should have been in the “strongly disagree” or “disagree” range. This profile was similar to the results found by Alexander. The means for all propositions for both groups of students in the second attempt also were in the “neutral” or “agree” range, although more were in the “neutral” range. Only a few students recognized the impli-