

Utilization of the Multi-Pathogen Approach in an Online Program for Prehospital Responders in High Consequence Infectious Diseases

Dr. J Lee Jenkins MD, Dr. Richard Bissell PhD,
Dr. Lucy Wilson MD

Department of Emergency Health Services, Umc, Baltimore, United States

Introduction: The prehospital disaster and emergency medical services community stands on the front-line in the response to events such as novel influenza, multi-drug resistant tuberculosis, and other high consequence diseases such as the Ebola Virus Disease.

Aim: To address provider and community safety, we developed an online educational program utilizing a Multi-Pathogen Approach to infectious disease personal protective equipment (PPE) deployment by prehospital providers. Such vigilance starts with syndromic recognition and quickly transcends to include operational issues, clinical interventions, and public health integration.

Methods: The University of Maryland, Baltimore County (Maryland, USA), Department of Emergency Health Services partnered with the Maryland State Department of Health (USA), to develop an online educational curriculum. The curriculum was developed through an expert panel consensus group including prehospital providers and is hybrid in design and includes awareness level training and procedural guidance.

Results: Currently deployed online, this educational content demonstrating the use of the Multi-Pathogen Approach is accessible open-access via YouTube worldwide on computers, tablets, and smartphones. This curriculum is also accessible for continuing medical education to over 50,000 prehospital, hospital, and clinic personnel throughout Maryland and the National Capital Region of the United States. The curriculum consists of twelve modules of didactic and live videotaped demonstrations.

Discussion: The development of the Multi-Pathogen Approach for the deployment of PPE and the use of online education modules has given prehospital providers an easily accessible open-access tool for high consequence disease management. The development of educational efforts such as these can help ensure better patient care and prehospital EMS system readiness.

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Weaknesses and Capacities Affecting the Prehospital Emergency Care for Victims of Road Traffic Incidents in the Greater Kampala Metropolitan Area: A Cross-Sectional Study

Dr. Joseph Kimuli Balikuddembe^{1,2}, Assoc. Prof. Ali Ardalan^{1,3,4},
Assoc. Prof. Davoud Khorasani-Zavareh^{5,6},
Assoc. Prof. Amir Nejati¹, Dr. Owais Raza⁷

1. Institute For Disaster Management And Reconstruction, Sichuan University, China, And Hong Kong Polytechnic University, Chengdu, China

2. East African Center for Disaster Health and Humanitarian Research, Kampala, Uganda
3. Department of Disaster Public Health, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran; National Institute of Health Research, Tehran University of Medical Sciences, Tehran, Iran, Iran
4. Harvard Humanitarian Initiative, Harvard University, Cambridge, USA
5. Safety Promotion and Injury Prevention Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran
6. Department of Clinical Science and Education, Karolinska Institute, Stockholm, Sweden
7. Department of Epidemiology and Biostatistics, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran

Introduction: Prehospital emergency care is a vital and integral component of health systems, particularly in resource-constrained countries like Uganda. It can help to minimize deaths, injuries, morbidities, disabilities, and trauma caused by road traffic incidents (RTIs). This study identifies the weaknesses and capacities affecting the prehospital emergency care for the victims of RTIs in the Greater Kampala Metropolitan Area (GKMA).

Methods: A cross-sectional study was conducted in the GKMA using a three-part structured questionnaire. Data related to the demographics, nature of RTIs and victims' pre-hospital experience and existing Emergency Medical Services (EMS) were collected from victims and EMS specialists in 3 hospitals and 5 EMS institutions, respectively. Data were descriptively analyzed, and a principal component analysis was employed to identify the most influential weaknesses and capacities affecting the prehospital emergency care for the victims of RTI in the GKMA.

Results: From 459 RTI victims (74.7% males and 25.3% females) and 23 EMS specialists (91.3% males and 8.7% females) who participated in the study between May and June 2016, 4 key weaknesses and 5 key capacities were identified to affect the prehospital emergency care for RTI victims in the GKMA. Although some strengths exist, (e.g., ambulance facilitation, EMS structuring, and coordination), the key weaknesses affecting the pre-hospital care for victims were noted to relate to the absence of predefined EMS systems, particularly in the GKMA and Uganda as a whole. They were identified to involve poor quality first aid treatment, insufficient skills/training of the first responders, inadequate EMS resources, and avoidable delays to respond and transport RTI victims to medical facilities.

Discussion: Though some strengths exist, the weaknesses affecting prehospital care for RTI victims primarily emanate from the absence of predefined and well-organized EMS systems in the GKMA and Uganda as a whole.

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Who Can Evaluate the Safety of a Hospital Building Just After a Great Earthquake?

Prof. Junko Ikeuchi

Setsunan University, Neyagawa City Osaka, Japan