

and no harm was detected by the psychological support team during the exercise.

**Conclusion:** The results of the study show that involving children as victims in pediatric disaster drills is possible in these conditions without impacting the mental welfare of children.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s129–s130

doi:10.1017/S1049023X23003424

### Utilizing AEMS (Assess-EOP-Map-Simulate) Algorithm to Assess and Spatially Link Prehospital Emergency Medical Services Resources in Road-Traffic Mass Casualty Incidents in Kumasi, Ghana

Roxane Richter PhD, EMT<sup>1,2</sup>, Thomas Flowers D.O., MS, BS<sup>3</sup>, George Oduro MD, FRCS, FCEM, FGCS<sup>4</sup>, Joe Bonney MD, MBChB, MPH, MSc Dm, MGCS<sup>4</sup>, Paa Forson MD<sup>4</sup>, Chris Oppong MD, MbChB<sup>4</sup>, Sonia Cobbold MS, BS<sup>4</sup>, Rainier Richter MS, BS<sup>5</sup>

1. University of Louisville, Louisville, USA
2. Fulbright-Fogarty Postdoctoral Global Health Fellow, Sub-Saharan Africa, Kumasi, Ghana
3. Owensboro Regional Health Center Hospital, Greenville, USA
4. Komfo Anokye Teaching Hospital, Kumasi, Ghana
5. The Learning Lab, Nashville, USA

**Introduction:** Due to the high number of road traffic accidents with acute injuries and fatalities—particularly in Mass Casualty Incidents (MCI) in low-resource urban sub-Saharan African cities—research was undertaken to create an evidence-based algorithm that could be used to assess and geospatially link EMS needs in Kumasi, Ghana, to trauma resources. Our examination showed that non-MCI fatalities was approximately 2.5%, however, MCI fatalities were found to be 1.8 times higher—at 4.3%, indicating significant opportunities in the planning, preparedness, care, and transport among MCI patient management.

Therefore, several studies (funded through Fulbright-Fogarty and Fulbright Specialist programs), supported the development of the A-E-M-S (Assess-EOP-Map-Simulate) Medical Mass Casualty Algorithm that began networking accident ‘hotspots’ to existing trauma-level capabilities and surge capacity competencies in eight specified Kumasi hospitals. This low-cost response model promises to be an innovative alternative to long-term infrastructure development and high-priced resource distributions. Use of GIS and UAV drones allowed response systems to geospatially locate, classify, shift, and/or augment resources as needed in conjunction with hotspots.

**Method:** Sample sizes were averaged at 295 for all patients' ages, with only a sample size of 292 for adults at 95% confidence intervals, and a standard deviation of 0.5. A total of 300 road-traffic accident victims were collected at KATH A&E in February–May, 2017, utilizing handheld devices by four researchers 24/7 daily.

**Results:** Our examination showed that non-MCI fatalities were approximately 2.5%, however, MCI fatalities were found to be 1.8 times higher—at 4.3%, indicating significant opportunities in the planning, preparedness, care, and transport among MCI patient management.

**Conclusion:** To date—and in partnership with Kwame Nkrumah University of Science and Technology, Komfo Anokye Teaching Hospital, Ghana Medical Council, Health Services, National Disaster Management Organization, and others—over 306 Ghanaian healthcare providers from 80 different facilities have been trained in the AEMS program.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s130

doi:10.1017/S1049023X23003436

### Preparedness of Afghan Refugees for Disasters

Jamla Rizek MBA, MSN, RN, CEN, CPEN, NHDP-BC, NRP BIDMC, Boston, USA

**Introduction:** Refugees encounter many obstacles en route to the United States. Refugees face very different disasters and response resources in the US than in their home countries. On arrival to the US, refugees receive a brief introduction to disaster preparedness, but do not receive specific education based on their home country or final location of residence. This study aims to determine the preparedness levels of Afghan refugees in the United States.

**Method:** This study used a modified General Disaster Preparedness Belief Scale (mGDPBS). The mGDPBS consists of 20 of the 45 questions from the GDPBS, selected from each of the six subscales most applicable to the refugee population. Ten Afghan refugee families were selected from the Afghan community in Virginia. Refugees were interviewed by a recorded one hour interview via Zoom. A list of the questions were provided, and a translator was available to ask the questions in the respective language of the refugee: Dari or Pashtu.

**Results:** Data collection and analysis to be completed by January 30, 2023.

**Conclusion:** Data collection and analysis to be completed by January 30, 2023.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s130

doi:10.1017/S1049023X23003448

### Foot Injuries at Music Festivals—One of the Most Common Presentations to On-site Medical Services

Matthew Munn MD, MPHil<sup>1</sup>, Page Hanrahan RN<sup>2</sup>, Silvina Mema MD<sup>3</sup>

1. University of British Columbia, Vancouver, Canada
2. Alberta Health Services, Calgary, Canada
3. Interior Health Authority, Kelowna, Canada

**Introduction:** Foot injuries are a common patient presentation at music festivals, and are resource-intensive patient encounters by virtue of their comparative volume. There are no published accounts devoted to these ubiquitous, typical, predictable festival injuries leading to presentation to on-site medical services for treatment.

**Method:** A retrospective chart review was performed of visits to medical services for first aid or medical care involving feet at a multi-day music festival in Canada. Data extracted included demographics, injury characteristics, and type of footwear. Encounters were classified as initial or repeat visits, and repeat visits were assessed for having had previous dressings applied.