

# Translating Theory to Practice: Towards a Certificate in Global Health

Donald A. Donahue, DHEd; James J. James, MD, Dr PH

It is generally recognized that the number and frequency of disasters are increasing. In 2017, an active hurricane season in the North Atlantic, wildfires, thunderstorms, and severe precipitation events generated \$337 billion in global catastrophe economic losses. More than 11,000 people lost their lives or went missing in disasters, while millions were left homeless.<sup>1</sup>

In its *World Health Report 2007*, the World Health Organization (WHO) observed that

Infectious diseases can not only spread faster, they appear to be emerging more quickly than ever before. Since the 1970s, new diseases have been identified at the unprecedented rate of one or more per year. There are now at least 40 diseases that were unknown a generation ago. In addition, during the last five years, WHO has verified more than 1100 epidemic events.<sup>2</sup>

The ensuing decade has included an influenza pandemic, rapid spread of Zika, and an unprecedented outbreak of Ebola in West Africa. The world has also endured cross-national and internal conflicts that have produced historic levels of mass displacements, famine, and communicable disease outbreaks.<sup>3</sup>

Across this same span of years, there have been multiple calls for developing leadership in disaster medicine and global health. Strikingly similar statements have been made by Rigby, Kumanyika, and James in 2004; Leeder, Raymond, and Greenberg<sup>4</sup> in 2007; the United Nations High-level meeting on noncommunicable disease prevention and control<sup>5</sup> in 2011; and Silberner and Marissa Miley<sup>6</sup> in 2015; highlighting the need to “build the skills and capacities necessary to help the world be better prepared.”<sup>6</sup> Following the 2014 West Africa Ebola outbreak, (then) WHO Director General Margaret Chan summarized the challenges of global disaster medicine capabilities as including the absence of national detection and response capacities at nearly every level of the health system and universally weak preparedness and response capacities.<sup>7</sup>

Disaster medicine education and training programs exist in multiple venues, including medical

schools, independent organizations, and health systems. However, no common or standardized education and training frameworks exist to integrate interdisciplinary skill development.<sup>8</sup>

These shortcomings are being addressed, in part, by the WHO Emergency Medical Teams (EMT) Initiative.<sup>9</sup> The EMT effort “assists organizations and member states to build capacity and strengthen health systems by coordinating the deployment of quality assured medical teams in emergencies.”<sup>9</sup> This is a decided step forward with regard to formally organized response teams, but does little to advance the response competencies of those not affiliated with a WHO-sanctioned team. Experience has shown that all disasters are local; therefore, all initial responses are local.<sup>10</sup> These responses reflect the practice, experience, and approach of the individual responder or organization. They also include the full range of health responders, from all of the health disciplines.

There is a discrete and growing body of knowledge that encompasses the emerging discipline of global medical preparedness and response. The applications of this knowledge span a broad spectrum of operational environments that can include direct disaster relief, homeland security medical operations, humanitarian assistance, stability operations, the military, and nontraditional settings.

The growing recognition of this new mission area has resulted in the establishment of multiple professional organizations. The National Disaster Life Support Foundation was established using a grant from the Department of Health and Human Services in 2005. Its mission is to develop and administer training in disaster medicine. In 2006, the American Academy of Disaster Medicine and its certifying counterpart, the American Board of Disaster Medicine, were formed to promote professionalism and define standards. The significance of this evolution was further underscored by the 2007 White House issuance of Homeland Security Presidential Directive/HSPD-21, Public Health and Medical Preparedness, which mandated education and training of this nature. In 2013, the Society for Disaster Medicine and Public Health was established as the successor to the American Medical Association’s Center for Disaster Medicine and Emergency Response. The Society’s primary focus has been defining a discipline of Disaster Medicine and

<sup>3</sup>The Syrian refugee crisis, South Sudan civil strife, Yemen cholera outbreak, and Rohingya forced migration being recent examples.

Public Health Preparedness through education and training and academic publications.<sup>11</sup>

The creation of these entities both demonstrates the demand for a defined professional competency and reveals the lack of a common standard evidenced by a recognized certification. The present realm of disaster medicine includes disparate training, diverse standards (there are multiple triage models used in differing venues), and no formal, commonly recognized qualification process.

Certification is, quite simply, a measure and outward demonstration of self-regulation. Freshly graduated accounting majors aspire to become Certified Public Accountants, as this provides a testimony to competency, and a publicly recognized validation of qualifications. DMPHP is unusual in that it transcends disciplines, linking disparate skill sets to a prescribed set of missions. When managed correctly, a certification becomes the standard for driving educational content, a basic qualification, and a totem that identifies a discipline, much as the Certified Emergency Manager (CEM)<sup>12</sup> does for emergency managers and the Project Management Professional (PMP) certification<sup>13</sup> for project management.

It is clear that the realm of disaster medicine is beginning to mature. Multiple entities are moving toward cooperation, if not consolidation in some sectors. Those who see disaster medicine as a specialty, subspecialty, or alternate qualification will inevitably seek an outward manifestation of these skills. The reasons certifications and designations as fellows exist are myriad and include demonstration of achieving a standard, professional recognition, and membership in an ad hoc community that serves humanity.

On December 7, 2015, representatives from multiple stakeholder groups met in Honolulu.<sup>b</sup> They utilized a modified Delphi approach and drew from multiple examples of professional certifications to create a model for evaluating disaster medicine expertise. This model is based on a point score that encompasses civilian or military practice and experience, education and training, scholarly activity including research and instruction, active participation or leadership in disaster and global health related organizations, and critical life experiences such as cultural sensitivity and language proficiency. Weighted scoring of 3 domains—individual education and training, practice, and research and teaching—encompassing 13 areas of expertise provides a classification of the common core skills required of or contributions made by a qualified global health responder. Successful completion of

<sup>b</sup>Key representation and foundational contributions for the Honolulu meeting were provided by Donald Donahue, DHEd, and Arthur Cooper, MD, for the American Academy of Disaster Medicine; James James, MD, for the Society of Disaster Medicine and Public Health; Raymond Swienton, MD, and Cham Dallas, PhD, for the National Disaster Life Support Foundation; and Frederick Burkle, MD, for Harvard Humanitarian Initiative. Additional invaluable participation was by the East-West Center and representatives of the military, state health agencies, non-profit organizations, and academia.

the requirements leads to the awarding of the Global Health Responder Badge, and helps identify a ready, willing and able responder.

Implementation of this qualification process will offer multiple benefits. It will (1) serve as a precredentialing process for WHO EMT and local responder entities; (2) establish a registry of qualified individuals, which would be made accessible to legitimate and authorized users; and (3) create a more integrated community, which would lead to the development of a common lexicon, core competencies, and supporting educational standards.

Countless disasters have demonstrated that reliance on local facilities and outside augmentation can be too little, too late. “Hurricanes Katrina and Rita have shown us that having plans to ‘surge in place,’ meaning expanding a functional facility to treat a large number of patients after a mass casualty incident, is not always sufficient in disasters because the health care organization itself may be too damaged to operate.”<sup>14</sup> The immediate ability to respond and to save lives under austere conditions relies significantly on core interdisciplinary aptitudes. Defining and certifying those abilities promotes a ready, robust, and reliable global response capability.

### About the Authors

*The Graduate School, University of Maryland University College, and Center for Global Education Initiatives, University of Maryland, Baltimore (Dr Donahue), and Society for Disaster Medicine and Public Health, Inc (Dr James).*

*Correspondence and reprint requests to Donald A. Donahue, 3501 University Blvd. East, Largo 3158, Adelphi, MD 20783 (e-mail: donald.donahue@uuc.edu).*

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