

EDITORIAL

Disaster Medicine and Public Health Preparedness: A Discipline for All Health Professionals—Redux

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The title of the editorial referenced here was published in *Disaster Medicine and Public Health Preparedness*¹ (DMPHP) in 2010. At that time, the American Medical Association (AMA) was still the journal's publisher and served as a philosophical cornerstone for the work we have since been engaged in which is evolving the discipline of disaster medicine and public health. Now 4 years later, the DMPHP is the official journal of the Society for Disaster Medicine and Public Health (SDMPH) and published by Cambridge University Press, and we believe it is time to revisit the referenced editorial to both update what progress has been made toward achieving our objectives and to note changes to or deviations from our original goals. As we review in a sequential manner the main elements of the 2010 editorial, please note that in *X* years from now another iteration will be necessary, as this current review is meant to be a living document, defining an evolving process that needs to embrace change and be informed by you, the reader. One note for consistency, in 2010 we referred to the discipline as disaster medicine and public health preparedness; currently, disaster medicine and public health (DMPH) has been adopted as the discipline name.

In conducting this exercise, we focus on the significant elements and goals from the original editorial in chronological order.

UNDERLYING ASSUMPTIONS

1. To respond effectively, health professionals, regardless of specialty or area of expertise, require a fundamental understanding of the disaster management system and the ways in which various health-related roles are integrated to protect health and respond to disease or injury.
2. In a disaster or public health emergency (PHE) health professionals have an obligation to protect and preserve the health, safety, and security of their patients, families, and communities, as well as themselves.
3. All health disciplines should be knowledgeable about the range of illnesses and injuries that may arise and how their particular expertise facilitates effective response. In addition, all must be able to

recognize the general features of disasters and PHEs and be knowledgeable about their impact on the population, how to report a potential public health event, and where to access pertinent information as required.

4. Most disaster events are on a scale that communities, whether in the developed or developing world, can manage well. Consequences are usually limited to direct injuries and deaths.
5. Large-scale PHEs place unprecedented demands on the existing public health infrastructure and system that may increase overall morbidity and mortality. PHEs require an added degree of coordination, cooperation, and collaboration between the clinical workforce and public health authorities

Although these assumptions are still valid within themselves, they are far too limited to serve as a sufficient base for the integrated, global response that must address the whole of the disaster cycle of prevention/mitigation, preparedness, response, and recovery. We can no longer focus on the immediacy of response and the provision of medical services to meet acute medical needs and think we have done enough to contribute to national and global health security. Whatever your position on the issue of global warming, the cycle of increasing human populations requiring and using more energy combined with diminishing availability of potable water and arable land have consequences. They will lead to more individuals being exposed to natural disasters more frequently and will provide the seeds for increased conflict between and within nations, with an ever rising toll on human populations.

Of course, it has become increasingly popular to diagnose impending doom, but it is just as apparent that practical and/or achievable solutions are not readily forthcoming. As Kenneth W. Bernard, MD, former Special Adviser for Health and Security on the National Security Council (NSC) Staff at the White House under President Clinton, once noted, "we cannot afford to develop a 'vision' for global health, including grand statements about equity and solidarity that are more about righteous indignation than the implementation of good public policy."²

At the journal, we believe that to address the formulation and implementation of good public policy,

a common platform needs to be created that allows for all of the health professions and disciplines to come together in the spirit of advancing health security for the public, at the expense of advocating for what is in the best interest of our individual associations and societies. We sincerely hope that the Society for Disaster Medicine and Public Health can become that platform and that we can begin to turn good intentions into good policy and programs through science and true collaboration.

DEFINITION OF DISASTER MEDICINE AND PUBLIC HEALTH PREPAREDNESS

“DMPHP is defined as the study and collaborative application of sound scientific principles, practices, and standards by multiple health professions for the prevention, mitigation, management, and rehabilitation of injuries, illnesses, and other problems that affect the health, safety, and well-being of individuals and communities in disasters and public health emergencies.” Although this definition can be tweaked in accordance with what we have said already, we believe this definition is sufficient to move forward. It embodies the objectives laid out in Homeland Security Presidential Directive 21 (HSPD-21), which served as the “official” guidance for much of our earlier work. The directive “specifically calls for the establishment of a discipline that recognizes the unique principles in disaster related medicine and public health; provides a foundation for the development and dissemination of doctrine, education, training, and research in this field; and better integrates private and public entities into the disaster health system.”

HSPD-21 is still viable and continues to underpin the work in which we are involved. As noted in 2010, “Proficiency in DMPHP requires knowledge and skills beyond those typically acquired in clinical and public health training and practice, and must encompass unique competencies. The delivery of optimal care in a disaster relies on both clinical and public health expertise, and depends on a common understanding of each health professional’s role in the broader emergency management system.” Acceptance of this observation underscores the conclusion that although DMPH draws from other fields, it must be differentiated by its own unique body of knowledge and skills; it must stand alone as a recognizable and distinct discipline.

The next three sections of the 2010 editorial address the emergency management, clinical, and public health aspects of DMPH. Although sufficient within themselves, these aspects are probably too narrow to comprehensively address DMPHP as it is more generally understood today. Again, the major focus of 2010 was on response, but as noted, we now believe the whole disaster cycle must be addressed. Also, the major focus was previously on health care and public health professionals and did not adequately encompass the multiple other sectors and individuals needed to achieve improved health security.

Today, the critical importance of individual and community resilience has become well recognized as being necessary to better prepare for, respond to, and recover from significant events. In addition, as disaster planning and training specialist Eric Auf der Heide, MD, MPH, has frequently detailed, the true first responders to an event are the survivors of that event (ie, family members, neighbors, passers-by) and are probably responsible for both a significant number of lives saved and a decrease in overall morbidity.³

DEVELOPING CORE CURRICULA AND TRAINING PROGRAMS IN DMPH

The good news here is that competency-based training programs addressing emergency management, public health preparedness, and disaster response have grown and proliferated globally and in the United States. The bad news is the persistence of a lack of integration that stems from multiple roots but mainly results from a sense of ownership that multiple disciplines and professions feel for one or more aspects of preparedness and response. Nowhere is this more evident than in the proliferation of multiple competency sets that largely describe the same thing using different language. We at SDMPH support the need for the development of a common curriculum based on a set of mutually developed core competencies for use in all health professional schools, such as those defined by Walsh et al.⁴ Discipline-specific competencies in support of preparedness and response are, of course, in the province of the parent discipline, but meaningful integration will be difficult at best without a common base curriculum.

BUILDING THE DMPHP RESEARCH BASE

Here, we believe that a great deal of progress has been made toward building this research base, especially at the US federal level. Much work has been done at this level to highlight the importance of research in this field and to better integrate efforts in grant-funding programs across agencies. Unfortunately, funding within these programs has been greatly diminished due to severe budgetary restrictions coupled with a lack of a unified advocacy voice for preparedness and response.

As to the professional literature supporting the enterprise, excellent texts are now available; peer-review journals continue to proliferate; and the increasing importance of the gray literature (eg, non-peer reviewed, articles, and reports) to this field has been more generally recognized. The next frontier in support of these efforts has already been crossed, with the wider acceptance of social media as a valid means not only for communication but to generate useful information and data.⁵

ESTABLISHING THE DISCIPLINE OF DMPHP—THE TIME IS NOW

This section concluded the 2010 editorial. In many ways, it was the most important, as it incorporated the concepts and

ideas presented and continued then to prepare a mechanism to move from discussion to action—the creation of a new organizational entity. And because this section of the editorial has been the focus of much of our work and accomplishments for the past few years, it will be subject of our next issue's editorial.

For now, our closing remarks will refer to the proposed organizational entity, which has now been established as the Society for Disaster Medicine and Public Health. We are a 501(c)3, with a functional website (sdmph.org), and are actively recruiting members. Included in the next editorial will be the society's vision and mission statement along with its underlying values and immediate priorities.

One of the difficulties we have encountered in getting the society started is a perception that it is in competition with an individual's parent professional organization. This could not be further from the truth; we need to embrace those parent organizations and strongly encourage prospective members of our society to continue in full support of their respective societies and associations. To underscore this, we have instituted a dues structure that would not add a financial

burden to our members or place them in the position of having to choose between organizations. This approach, however, also means that to be successful we must attract sufficient numbers to make us sustaining. With that in mind, we sincerely hope that you will visit our website, consider membership, and, most importantly, join with us on the path to greater national and global health security.

REFERENCES

1. James JJ, Benjamin GC, Burkle FM, Gebbie KM, Kelen G, Subbarao I. Disaster medicine and public health preparedness: a discipline for all health professionals. *Disaster Med Public Health Prep.* 2010;4(2):102-105.
2. Bernard KW. Health and national security: a contemporary collision of cultures. *Biosecur Bioterror.* 2013;11(2):157-162.
3. Auf der Heide E. *Disaster Response: Principles of Preparation and Coordination.* St. Louis, MO: CV Mosby; 1989. [Out of print, but available for downloading/viewing for noncommercial purposes at no charge, courtesy of the Center of Excellence in Disaster Management and Humanitarian Assistance, at <http://coe-dmha.org/dr/index.htm>.]
4. Walsh et al. Core competencies for disaster medicine and public health. *Disaster Med Public Health Prep.* 2012;6:44-52.
5. Cates AL, Arnold BW, Cooper GP, et al. Impact on dual-polarization radar technology and Twitter on the Hattiesburg, Mississippi tornado. *Disaster Med Public Health Prep.* 2013;7:585-592.