Our Health is the Public's Health: Pain Management Leadership in the COVID-19 Pandemic

Pandemics convulse societies more than war. In war, selected populations retreat behind tribal or national identities and fight a visible enemy. Once killing stops, the heroic sacrifices of warriors, the pain and suffering of victims, and the ensuing social evolution are dramatically memorialized over human history in art, stories, theatre, and books and, beginning in the 20th century, in movies and television. In contrast, during historic epidemics the invisible enemy, the pestilence, hides ghost-like in communities, seemingly striking randomly at loved ones. Fear-induced irrational theorizing fuels cognitive-emotional dissonance and the rapid spread of its psychological and social effects. Like a holocaust, suspicion infects the trust and affection of neighbors and ignorance and fear generate venal, tribal instincts as occurred with HIV and earlier plagues. Heroes of past epidemics, epidemiologists and lab biologists who exposed themselves to the unseen, unknown enemy to identify pathogens and to study and understand the spread of their diseases, were soon forgotten except by the scientific communities who revere them. Often overlooked were the multitude of clinicians who daily toiled in the front lines of these pandemics knowing they were at risk. These too were heroes.

The story of the COVID-19 pandemic will be different. Newspaper, radio, television and on-line reporters now daily highlight front line warriors, the health care workers caring for ill COVID-19 patients. Since the sickest are generally older and already suffering from chronic illness, they are also more likely suffering from a chronic pain condition. Thus, whether on the front lines of primary care, nursing homes, emergency rooms, the surgical suite, or hospital wards, those caring for pain across our population daily risk exposure, illness and the health of their families. Two articles in this issue of *Pain Medicine* describe how leadership from the pain medicine field

will make a difference in improving pain care and reducing risk in this pandemic. Johns Hopkins' Steven Cohen, Co-editor of *Pain Medicine's* Neuromodulation & Interventional Section, and his colleagues, in their Special Article "Pain Management Best Practices from Multispecialty Organizations during the COVID-19 Pandemic and Public Health Crises" ("Best Practices"), discussed further in the accompanying video by Dr. Cohen and Dr. Friedhelm Sandbrink from the VA, provide us with consensus guidelines for the field. Critically, these guidelines are endorsed by the most prominent national and international medical societies focused on pain management** and by pain experts from the health systems of the federal Departments of Veterans Affairs and Defense (1). The high level of timely cooperation

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amongst leaders of medical societies that are usually challenged to collaborate effectively in addressing health policy needs is extraordinary. Such collaborative leadership is to be celebrated. We are also fortunate that our international colleagues, Xue-Jun Song and co-authors, Chinese pain medicine leaders from Shenzhen and from Wuhan Province where the outbreak began, share their unique perspective, "Pain Management During the COVID-19 Pandemic in China: Lessons Learned" ("Lessons Learned") (2). Dr. Song, recipient of AAPM's Robert Addison Award in 2018 and Co-editor of the Methodology, Mechanisms and Translational Research Section of *Pain Medicine,* and his colleagues helpfully describe the first emergence of the disease, its early management, and lessons learned from its effects on pain

practice in China. In a related editorial in this issue, MD Anderson's Larry Driver, Editor of the Ethics Forum in *Pain Medicine*, discusses the principles of medical ethics in the context of caring for pain during COVID-19. AAPM has also hosted a webinar for discussion of salient clinical points raised by our colleagues in the field.

Public attention in a viral pandemic naturally focuses both on how to prevent the spread of a disease in a population and on how to reduce its human toll, including fatalities and social disruption with its public health and economic consequences. Public scientists enter a political realm to help prevent spread by recommending social policies that are informed by real-time evidence but may be at odds with politicians who do not understand epidemiological science and may prioritize minimizing economic harms. Effectively managing pandemics requires managing these tensions while implementing population-based interventions that are respected and followed. These include widespread testing, isolation of infected persons, and careful behavioral habits such as interpersonal distancing, glove and mask use, handwashing and use of disinfectants. Uncertain or mixed messages from authorities about these measures increases the likelihood that infected asymptomatic, minimally symptomatic or recalcitrant individuals will spread the disease in their social networks. A national health system can implement these strategies successfully, as they have appeared to have partially accomplished in China and South Korea, by combining widespread population testing to identify carriers and rigorous introduction of social policies such as quarantining and restricting travel and social gatherings. These interventions serve to "flatten the curve" so that health systems themselves are not all-at-once overwhelmed with a large bolus of very ill patients for whom they are not resourced to treat effectively as we have already witnessed in several countries.

COVID-19 teaches us once again that a well-functioning health system must be resourced with the necessary equipment, hospital and clinical services, and health care workers to reduce the human toll of an illness. The system must not only test for infection at the population level but also effectively treat those who fall ill, while continuing to treat the general population with all the other diseases and sicknesses that co-occur and may worsen with the pandemic. To maintain societal confidence, political leaders need to communicate sensible, achievable guidelines, generated by health leaders and evidence-based to the degree possible, for how to manage the care of a population of potential and infected patients. For weeks now, developing and evolving these rules based on emerging science has been a high priority in health systems across the country and the world. (3)

As Drs. Cohen, Song and their colleagues emphasize, chronic pain's high prevalence in our population, as the most disabling and costly health condition and the most common reason people seek health care, makes managing pain in a pandemic particularly challenging and important. "Best Practices" and "Lessons Learned" articulate guidance for employing strategies in risk mitigation, triage and clinical care for our patients. Of course, care must prioritize attention to acute, new pain that may herald a potentially lethal condition requiring immediate treatment such as myocardial infarction or for cancers in which early treatment reduces mortality. More challenging in the pandemic is guidance for managing acute non-lethal pain, say a herniated spinal disk, or persistent or recurrent pain associated with a host of causative medical conditions and co-morbidities. These painful conditions will be worsened by the stress of the pandemic and are often associated with an increased risk of death from COVID-19. Our colleagues do not duck from this challenge as they address its medical, behavioral and sociocultural complexity head-on. They acknowledge the contributions of disease and injury as

well as of psychological and sociocultural factors, including structural problems in the health system, including the demoralization of our work force. Already, the loss of physicians' connectivity with patients and colleagues associated with the steadily growing productivity demands of America's commercial health system is taking its toll. Even before the pandemic, physicians were leaving the workforce at increasing rates due to "burnout" manifested clinically by growing rates of depression and suicide (4). In pain management, this "generic" stress was worsened by the recent "opioid crisis". The new and more universal stress, the COVID-19 pandemic, can only worsen chronic stress and its negative effects on the emotional and physical well-being of patients in pain, their families and caregivers, and their healthcare workforce. We must take care of ourselves to capably care for others.

Sources of stress are innumerable. Although much is written already about the challenges faced by health systems in obtaining sufficient equipment and supplies to protect patients and the healthcare workforce, increasingly stories are told about the personal courage of dedicated doctors, nurses and other clinicians providing exceptional care in potentially dangerous conditions. The stressful settings are many. Pain clinicians, particularly our colleagues with anesthesiology training, are called to care for those requiring airway management and urgent pain procedures, sometimes in the most infectious settings where exposure to large viral loads, which may be correlated with COVID-19 disease severity, are more likely. Front-line clinicians in emergency rooms and primary care clinics care for patients with pain while not knowing their infection status. Medical specialists many months or years away from training for managing acute COVID-like illnesses are called to help in high risk environments. Compelled by their professionalism, these clinicians may proceed without adequate protections or training, thereby risking infection. Outpatient pain clinicians and pain educators now must inventively convert

much of their work to online and virtual venues, hoping that their clinical care and their teaching will be effective. Those with ongoing research must close certain aspects of studies while temporarily benching research staff. The stress of making "the right" decisions, balancing the protection of personal and family health against the sense of professional duty, can be enormous. Added to this stress are the universal worries about the well-being of relatives and for parents, the supervision of children home-schooling. The medical world has changed.

Appropriately in these circumstances, Cohen and colleagues "Best Practices" provides guidance on the mental health needs of not just patients but also of clinicians who must maintain the competency our workforce. Noteworthy are similarities between "Lessons Learned" and "Best Practices" in their clinical guidance despite different sociocultural settings. These perspectives will help guide our profession through these stressful times while data are being gathered and analyzed to help us develop evidence-based health policy for future care. Such guidance will reduce the mental stress of "guess-work" decisions, and their associated moral dilemmas, as our health systems struggle to address pain management in the months ahead. Dr. Driver's thoughtful ethics overview will help shepherd us through the "moral stress" of mitigation decisions and self-care priorities.

Like many emergencies, the pandemic has brought out the best in us, besides our work on the front lines - an unusual level of social cooperation for our field. Our record has been spotty over the decades. Despite growing societal awareness of the human and economic costs of pain and our patients' needs, our field's call for better education and training in pain management of all clinicians and better access to competent multi-modal care longitudinally in health systems generally fell on deaf ears in organized medicine and its academic counterparts (5,6,7). Fostered by a commercial health system that demands income generation from hospitals, clinics and their

clinicians, pain training generally focused on competency in income-generating procedures to support the health systems that prioritize revenue to survive. Without higher level support for cooperative leadership to provide best care, specialty organizations and pain societies competed rather than focusing on developing unified positions that changed clinical policy to the benefit of the nation's large population of patients in pain. Thus while evidence mounted for the ineffectiveness of much of unimodal treatment (e.g., medication or procedures) to treat pain longitudinally and for the effectiveness of multi-modal care, health systems and insurance failed to provide access to such care (8). The resulting opioid crisis added social stigma (9) to the stress of patients with pain and the providers treating pain. Only the relatively under-resourced VA and DoD health systems uniquely cooperated, by necessity, in response to the documentation of pain and its devastating personal effects on the flood of injured troops from the Middle East wars. Their emphasis on personal "whole health" in an outcomes-based system of collaborative multi-modal stepped pain management longitudinally from the battlefield to home, primary care and specialty settings (10) is now viewed as a model for our health system nationally (11). A positive outcome is, finally, the recognition that training in the use of multi-modal evidence-based pain therapies is needed, that access to these therapies must be universal, and that new effective therapies must be developed and implemented widely (12).

In this pandemic, the leadership of several specialty societies and organizations have actively collaborated to provide essential pain management guidance to our nations' clinicians and health systems. This guidance will evolve as new science emerges – not just from studying COVID-19 but also from studying the innovations in care delivery brought on by the pandemic. We applaud them, and hope that their effort marks the beginning of a new era, post-COVID, marked by the

commitment to a collaborative spirit in our field for the long-term benefit of patients suffering pain and for the benefit of the public health.

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