An Epidemic, a Scourge, or a Plague

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Ebola and Zika viruses are infectious diseases that spread and reached numbers that fit comfortably into the strict World Health Organization and Centers for Disease Control and Prevention definitions of epidemic. HIV has been there for almost 40 years. There undoubtedly will be more of these types of epidemics as zoonoses are out there lurking and climate changes have the potential to unleash many more national and international epidemics.[1]

However, calling the dramatic increases in the prevalence of type 2 diabetes, obesity, and other other chronic diseases "epidemics" has the potential to shift attention for addressing these increases away from human behavior and society toward medical or surgical solutions. Medicalizing a societal problem ignores all the "upstream" issues that helped bring it into being. Referring to the large increase in opioid overdoses and related deaths as an epidemic calls attention to the problem, but the term doesn't help physicians and mental health professionals, the pharmaceutical industry, hospitals and health systems, families, and societal forces—all of which have been complicit in creating the current situation over the past 50 years. An emphasis on medicalization and cure can cause people to pay less attention to root causes, which is where the hard work has to be done.

Opioid overuse is a problem that must be addressed in a deliberate, evidence-driven, compassionate way. Physicians have to own what we helped create but need help from every level of our communities to change the direction of the problem. This issue of the *WMJ* contains several articles that address the problem of opiate overuse as it connects to the practice of medicine.

Prince and Seiden offer suggestions in their commentary[2] that range from becoming more consistent about the monitoring and prescribing of opioids in clinical practice to policy about public education, harm reduction, and the expansion of treatment and mental health over incarceration. Most of what they recommend in the clinical realm have been or are being implemented in the large health systems that dominate the state of Wisconsin and most electronic health records are set up to remind clinicians of what they suggest. However, their list of recommendations summarizes very well the areas that must be used as part of the prevention and treatment of opioid-addicted patients.

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The use of emergency departments (ED) and urgent care centers for pain and pain control creates challenges for opioid management. Often ED and urgent care, particularly in smaller hospitals and freestanding centers, may not have access to patient records in a way that would let them make clinical plans consistent with the case managers and primary care clinicians who manage most of opioid prescribing. Hernandez-Meier[3] and colleagues carried out a study of the use of the state's electronic Prescription Drug Monitoring Program (PDMP) by ED physicians. Although the use of the enhanced PDMP became mandatory April 1, 65% of physicians queried used the program during the study period and virtually everyone found it useful and changed their prescribing as a result. Barriers of time and documentation made the use of the PDMP difficult, but fortunately it is not a big gap between pre- and post-mandatory use.

Office management, particularly in pain clinics, needs to move away from individual management of opioid use to a registry and population management process that captures all patients in a practice and uses a registry and team process to improve care. Koschak and colleagues describe a quality improvement process that should be a model for pain clinics.[4] The authors offer some examples of data sheets and team care that assure that patients are monitored and receive best-practice care.

Looking at everyone in a practice to find patterns is essential to practicing successfully in the 21st Century.

And finally, occupational medicine is another important place where medical care, pain management, and functional assessment are managed. Vasudevan offers a perspective from employee health that is similar to the other examples in this issue and represents a fortunate coalescence of management that, if used, will at least begin to make consistent care of pain and opioid prescribing across systems in communities.[5]

Genomics, genetics, and human behavior

Someone once asked how family doctors keep up with all the new developments emanating from basic and clinical research and my answer is that we can't. The challenge is to be able to determine which new direction in basic research is likely to translate into important progress that should be applied widely to populations. Genetics and genomics are 2 areas that hold great promise but may not be thought currently of as a part of everyday practice. So it is no surprise that McCauley and colleagues found in a survey of Wisconsin physicians that adult generalists were less likely to know about genetics, genetic testing, and use it in their practices than specialty clinicians.[6] There was also a split in the group by age, with younger physicians—who undoubtedly had genetics as a larger part of their training—more inclined to do testing.

A hospital-based case control study from a large Midwest health system looked at the relatively unusual syndrome of heparin-induced thrombocytopenia and found a high level of comorbidity with a number of known autoimmune disorders.[7] These findings should be kept in mind whenever a patient with an existing autoimmune disorder requires anticoagulation, or a patient who develops the syndrome should be investigated for an autoimmune disorder. Further research about this syndrome no doubt will involve genetic studies.

Programs to increase hand washing by staff as an indicator process have been used as ways to change the culture of a medical system or hospital. A study from the Veterans Affairs System by Bittner and colleagues randomized patients in intensive care units and medical-surgical wards and studied their and their family members' willingness to remind physicians to wash their hands as they entered the room.[8] Despite most patients saying they were willing to remind their physicians, and despite information outside of each room on hand washing, mentioning hand washing to physicians was unusual in great part because patients in hospitals are often too ill to engage. It well may not be helpful to depend on patients and families as part of a reminder system.

Saporta and colleagues report a very unfortunate and thankfully rare complication of cardiac ablation treatment.[9] The patient developed an atrioesophageal fistula that seeded her brain and led, through a complex series of clinical complications, to her death. No procedure, no matter how frequently done, is without possible consequences.

REFERENCES

1. Protecting the Health and Well-being of Communities in a Changing Climate: Proceedings of a Workshop—in Brief. Roundtable on Environmental Sciences, Research, and Medicine and the Roundtable of Population Health Improvement. National Academies of Science Engineering and Medicine Press. Washington DC, June 2017.

2. Prince JM, Seiden WB. The national opioid epidemic: local, state, and national responses. *WMJ*. 2017:116(2)57-60.

3. Hernandez-Meier JL, Muscott R, Zosel A. The use of a statewide prescription drug monitoring program by emergency department physicians. *WMJ.* 2017:116(2)64-68.

4. Koschak B, Bryce DA, Harrington JT. Implementing population medicine in a pain management practice. *WMJ.* 2017:116(2) 75-78.

5. Vasudevan S. Opioid use for treatment of chronic pain: an overview and treatment guideline for injured workers. *WMJ*. 2017:116(2)61-63.

6. McCauley MP, Marcus RK, Strong KA, Visotcky AM, Shimoyama ME, Derse AR. Genetics and genomics in clinical practice: the views of Wisconsin physicians. *WMJ.* 2017:116(2) 69-74.

7. Sharma C, Chow B. A case of atypical Synovitis-Acne-Pustulosis-Hyperostosis-Osteitis (SAPHO) Syndrome presenting with osteomyelitis of the clavicle. *WMJ.* 2017:116(2) 87-88.

8. Bittner MJ, Routh JM, Folchert MD, Woessner NE, Kennedy SJ, Parks CC. Hand hygiene among health care workers: is educating patients and families a feasible way to increase rates? *WMJ.*2017:116(2) 79-83.

9. Saporta I, Chennamadhavuni A, Dolan MJ. Atrioesophageal fistula: a rare complication of radiofrequency ablation. *WMJ.* 2017:116(2) 84-86.

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