FROM THE EDITORS' DESK

Epidemics Avoidable and Unavoidable

Richard L. Kravitz, MD, MSPH

Division of General Internal Medicine, University of California Davis, Sacramento, CA, USA.

J Gen Intern Med 30(5):535

DOI: 10.1007/s11606-015-3263-0

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Some epidemics are unavoidable—the Black Plague, the Spanish Flu, polio before Salk and Sabin. Others are avoidable. Within this category of avoidable epidemics are those caused by doctors themselves, as they over-test, over-diagnose, and over-treat. These iatrogenic epidemics are not rare; they include the spate of prostate cancer diagnoses resulting from PSA testing, the rash of breast cancer treatments administered to the estimated one-third of mammographically diagnosed breast cancers with limited biological potential to cause harm,¹ and the recent deluge of patients treated with fibrates for “hypertriglyceridemia” or with cholecalciferol for “vitamin D deficiency.” (To head off any possible outcry: both of the latter conditions surely exist, but evidence for the benefits of treatment is scant.)

In this issue of *JGIM*, several articles touch on the theme of iatrogenic epidemics. In the study by Kiefer et al.,² the authors used NHANES data to estimate the number of Americans with undiagnosed diabetes (about 5 million) and prediabetes (about 49 million). The implication is that if screening recommendations were fully implemented, nearly 50 million Americans would receive a new diagnosis of prediabetes (ICD code 790.29). (The problem may be worse in China, as it is estimated that over 50 % of Chinese adults have prediabetes.) While prediabetes is associated with an increased risk of developing frank diabetes, there is no evidence that making the diagnosis reduces this risk, let alone the risk of adverse cardiovascular events. Furthermore, labeling otherwise healthy people with a diagnosis of dubious prognostic or therapeutic value can convey real harm.³

Iatrogenic epidemics can occur in the context of testing and diagnosis as well as screening. Headache is among the most common problems seen in ambulatory practice. In an analysis of data from the National Ambulatory Medical Care Survey and the National Hospital Ambulatory Medical Care Survey,

Mafi et al.⁴ found that the use of imaging such as CT and MRI scanning and referrals to specialists both doubled from 2000 to 2010. At the same time, lifestyle counseling decreased. The consequences extend beyond waste of resources, as contrast scans can cause kidney injury, and MRIs can pick up unidentified bright objects (white matter hyperintensities) that provoke anxiety and prompt further, potentially unnecessary, evaluation and treatment.

Another headline-grabbing epidemic involves the use of opioid analgesics for treatment of chronic non-cancer pain. The number of opioid prescriptions has increased sharply over the past decade, but as Mosher et al.⁵ wisely point out, this could reflect more people on opioids, the same people receiving higher doses for a longer duration, or some combination of the two. Their analysis indicates a doubling of the prevalence of opioid receipt from 2004 to 2012, while incidence (reflecting number of individuals newly starting on opioids) has crept up much more gradually (and actually declined from 2011 through 2012). Their careful epidemiological analysis of prescribing patterns provides reason for guarded optimism. Doctors start iatrogenic epidemics, and doctors can stop them.

Corresponding Author: Richard L. Kravitz, MD, MSPH; Division of General Internal Medicine, University of California Davis, Sacramento, CA, USA (e-mail: rkravitz@ucdavis.edu).

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