Letters

Editor's Note

The Risks of Prescribing Hydroxychloroquine for Treatment of COVID-19—First, Do No Harm

On March 21, 2020, President Donald Trump tweeted that hydroxychloroquine and azithromycin have "a real chance to be one of the biggest game changers in the history of medicine."[1] The president later said of hydroxychloroquine, "What do you have to lose? I'll say it again: What do you have to lose? Take it."[2]

Although the president acknowledged that physicians should be involved in the decision to use these medications, the message to patients with coronavirus disease 2019 (COVID-19), and people worried about becoming infected, was clear. Within days, a man in Arizona died after ingesting a chloroquine-containing aquarium product that did not require a prescription.[3] Federal regulators facilitated use of prescription hydroxychloroquine and chloroquine by immediately issuing an Emergency Use Authorization.

One way of quantifying the influence of these high-profile statements is to examine internet search behaviors. In this issue of *JAMA Internal Medicine,* Liu and colleagues[4] examined internet searches for purchasing chloroquine or hydroxychloroquine online. From March 16 to 29, 2020, searches increased 442% and 1389% for chloroquine and droxychloroquine, respectively, compared with the preceding 6 weeks.

Although testing of hydroxychloroquine for treatment of COVID-19 is underway, available data do not support its widespread use. The study[5] referenced by President Trump may have methodologic flaws. A small randomized trial suggesting benefit was unblinded, and some patients received concomitant steroids or antivirals.[6] Nevertheless, some physicians have begun prescribing hydroxychloroquine widely, which prompted at least 12 states to pass emergency prescribing restrictions.

The potential harms are substantial. Hydroxychloroquine is QT prolonging, which poses a risk of sudden cardiac death in certain populations. People with autoimmune conditions, disproportionately women and people of color, could face disease flares owing to medication shortages.[7] The burden may fall hardest on the most vulnerable; low-income patients worldwide could be the first to lose access to hydroxychloroquine therapy.

Given the toll of COVID-19, the pressure to *do something* is enormous and understandable. But that must not prompt clinicians to jettison the tenets of evidence-based medicine and the admonition to *do no harm*. As health care providers, we should inform patients about the evidence behind experimental therapies, work to enroll patients in randomized clinical trials, and consider the needs of patients without COVID-19 who may be effected by drug shortages. It is vital that we do not give in to nonevidence-based calls to embrace unproven therapies. Although we may be tempted to bypass enduring principles in this time of uncertainty and fear, the best way to protect patients is to stay grounded in evidence and to fight misinformation.

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