8 July 2020

BRIEF19

A daily review of covid-19 research and policy.

RESEARCH BRIEFING

A Spike in Demand for Hydroxychloroquine.

Hydroxychloroquine (HCQ) and chloroquine (CQ) are oral medications used to treat joint diseases (HCQ) and malaria (HCQ, CQ). HCQ and CQ are well tolerated for a 1-2 week course one might take for malaria prophylaxis when traveling to an endemic area. The doses proposed to treat covid-19 have potential side effects, including life threatening electrolyte abnormalities and heart rhythm disturbances. To date, the efficacy of HCQ or CQ in preventing or treating covid-19 is unclear.[1]

Despite this lack of evidence, world leaders, including President Donald Trump, and the press have discussed taking HCQ to prevent covid-19 infections. This discussion led to concern that there would be a run on HCQ and CQ, depriving people who needed the medication and increasing unintentional poisonings. Indeed, shortly after President Trump announced that he was taking HCQ, one man from Arizona died and his wife was hospitalized after ingesting chloroquine phosphate, a form of CQ used to clean fish tanks. The American College of Medical Toxicologists issued a position statement shortly after stating that HCQ and CQ should not be consumed except as directed by a physician[2].

The aim of a new study appearing in *JAMA Internal Medicine* was to better understand the patterns of use of HCQ and CQ use during covid-19. The authors also included azithromycin, an antibiotic and anti-inflammatory that rose to prominence after it was included with HCQ in a small early clinical trial in France of patients hospitalized with covid-19.

The authors included prescription sales between October 1, 2019 and March 31, 2020 using a database that captured 92 percent of all new and refilled prescriptions in the United States. They reasoned that changes in prescription sales during this time would be driven mostly by covid-19 demand. The authors found that after February, prescriptions of HCQ alone and HCQ in combination with azithromycin rose. Prescriptions for CQ did not change.

The authors did not have access to the reason for the prescriptions to validate the assumption of covid-19 as a driver, nor did they identify if people who normally needed HCQ (patients with lupus, for example) or azithromycin were unable to get them. Furthermore, their data was unable to ascertain if those who filled the prescriptions were also consuming the medication, or whether they were stockpiling or reselling.

The authors also investigated the geographic distribution of these drugs, noting that HCQ prescriptions were filled most frequently in New Jersey and Florida. Unfortunately, the authors did not further discern which ZIP codes in each state accounted for the highest number of prescriptions, despite varying population densities and covid-19 outbreaks in different regions.

The authors' results demonstrate that sales of HCQ and azithromycin increased abruptly in February 2020. This outcome can be explained by increased attention on these medications in the media, despite minimal evidence of their benefit in treating covid-19, and guidance from public health officials to avoid attempts to do so. The increased sales also underscores the unmet need for effective covid-19 treatments likelky to persist until we have a vaccine. It also raises another important question: Who wrote all these prescriptions?

—Michael Chary, MD

POLICY BRIEFING

A call to personal accountability.

Though at times on the opposite sides of issues, the American Hospital Association (AHA), American Medical Association (AMA) and American Nurses Association (ANA) have come together to release a resoundingly simple and unified message to the American public: wear a facemask. Citing its demonstrated efficacy in controlling the spread of the coronavirus during the initial social distancing phase and the subsequent surge of cases as the restrictions have been lifted, these organizations make the case that scientific evidence supports several tactics in combatting the continued pandemic, of which masks are an important example. As more hospitals approach their intensive care unit capacity, including in parts of Texas and Florida following a recent intense spike in cases there and elsewhere, renewed fears of personal protective equipment shortages have surfaced. These three organizations have come together to argue urgently that now is not the time for laxity. *Various*

—Joshua Lesko, MD

New surprise billing for patients seeking coronavirus treatment.

Surprise medical billing has been a recent target of healthcare reform for legislators, patient advocates and physician groups. Surprise billing primarily occurs when patients seek care outside of their established insurance networks (commonly seen in emergency visits, but also in other areas of the hospital such as ICUs, where patients do not always have the opportunity to choose their physician). When patients are treated in an out-of-network facility or by an out-of-network provider, their insurance company will only reimburse a portion of the costs, leaving patients responsible for the remaining balance. As part of the $2 trillion relief package signed in March as the covid-19 pandemic ramped up here in the United States, protections were enacted to prevent balanced billing for coronavirus-related care. Nevertheless, insurance providers have found a loophole, enabling them to pass costs along to patients—a coronavirus test must have been performed during the visit for the course of care to be covered. In the early days of the pandemic, tests were scarce and many screening algorithms reserved testing for the sickest individuals. While many have appealed this technicality, it remains to be seen what, if any, recourse is available to such patients. *NPR*

—Joshua Lesko, MD