12 May 2020

BRIEF19

A daily review of covid-19 research and policy.

RESEARCH BRIEFING

More studies show hydroxychloroquine is not effective for treating covid-19. A new study published in JAMA assessed 1,438 hospitalized patients with covid-19 who received hydroxychloroquine and azithromycin (HCQ+AZ), hydroxychloroquine (HCQ) alone, azithromycin (AZ) alone, or neither drug. These 1,438 patients represent 88.2 percent of all covid-19 patients admitted across 25 hospitals in the New York metropolitan region between March 15 and 28, 2020 with a final follow-up date of April 24, 2020. The authors compared inhospital mortality, cardiac arrest, and abnormal ECG findings (irregular heartbeat or elongation of the "QT interval," which indicates whether the heart is resetting normally after every beat). During the study period, 20.3 percent of all admitted patients died. The probability of dying from covid-19 after receiving HCQ+AZT was 25.7 percent; after receiving HCQ alone, 19.9 percent; after receiving AZ alone, 10 percent, and after receiving neither drug, 12.7 percent. After statistical correction for patient differences among the groups, there were no significant differences in mortality among any of the groups. Many side effects were reported in this study. Patients receiving HCQ+AZ were more likely to suffer from cardiac arrest compared with those in the other groups. However, some caveats are worth noting. This study was an observational study and not a randomized clinical trial, so which patients received various treatments were non-random events. The patients who received HCO+AZ were notably sicker than the other groups and, therefore, more likely to die regardless of the intervention. Of note, 13 percent of HCQ+AZ patients were mechanically ventilated in less than a day compared to 5 percent of patients who did not receive any drug.

Meanwhile, in the face of increasingly negative evidence regarding HCQ, some optimists have advanced the theory that HCQ fare better if zinc were included in protocols. While we are aware of no evidence to support this claim, a study preprint <u>published</u> in the journal *medRxiv* looked at this question. Hospitalized covid-19 patients in New York City who received HCQ+AZ plus zinc were compared with those who received HCQ+AZ alone. The researchers observed no difference in the number of days patients spent in the hospital, in intensive care units or on mechanical ventilators. While the paper states that patients who received zinc had half the odds of dying or transitioning to hospice when patients in the ICU were excluded, the methods of the paper are incomplete as currently published; the methods for how the data were pulled from electronic medical records are not adequately described.)

There has been a steady stream recently of negative studies on HCQ. However, the largest ones have been observational studies, not true trials. An important randomized clinical trial performed in Europe that included patients receiving HCQ is expected to be published this week —Joshua Niforatos, MD Research Section Editor and Lauren Westafer, DO, MPH

POLICY BRIEFING

Rural hospitals sue for support.

Hospitals across the country have been <u>losing millions</u> of dollars every week of the pandemic due largely to cancelled elective procedures and closed clinics. The Small Business

Administration (SBA) Paycheck Protection Program (PPP), part of the CARES Act, sought to mitigate the effect of this lost income, but under the PPP, bankrupt entities cannot receive loans due to their high risk of failure. Now some bankrupt rural hospitals, for whom the pandemic's toll came on top of years of financial hardship, are <u>suing the SBA</u> over being denied the funding. Judges in <u>Maine</u> and <u>Vermont</u> have recently ruled in favor of the hospitals, but lengthy legal proceedings may outlast the finite funding of the PPP. *Various.* –*Joshua Lesko, MD*

More than just the medication.

Concerns are rising that producing drugs and vaccines against SARS-CoV-2 may be more difficult than discovering them. Specific regulations governing production, transportation, and storage that can cause delays. It is unclear what modifications, if any, the FDA will make to its guidance. For example, the glass used to make vaccine bottles is already in shortage, though a coronavirus vaccine does not yet exist. Production of drugs themselves is also presenting challenges. Although the FDA granted an emergency use authorization for remdesivir, its manufacturer has had to find ways to produce the complex drug quickly. The global economic crisis poses problems, since many drugmakers rely on a vast network of partners to produce a drug, from supplying raw materials to packaging. *Various.*

Oregon tries to prevent virus from spreading among migrant farmworkers.

Members of Latinx communities in Oregon and many other states appear to be <u>contracting</u> SARS-CoV-2 at disproportionately high rates compared to their non-Hispanic white counterparts, likely reflecting that they are more likely to work in essential jobs and to lack comprehensive healthcare. Higher rates of diabetes and other chronic medical conditions common in these communities can lead to worse covid-19 outcomes. Individuals are also more likely to be undocumented, meaning they cannot collect unemployment and may feel compelled to work even while ill. These predisposing risk factors will be compounded for migrant workers who live in cramped housing during the harvest season. Oregon officials are worried about what will happen when an estimated 160,000 migrant workers arrive in the state for the harvest in late May. Oregon's Occupational Safety and Health Administration (OSHA) recently introduced a series of measures intended to protect these worker—primarily by reducing crowding in their housing accommodations—but the Oregon Farm Bureau is pushing back on behalf of growers who the bureau says will go out of business if they have to meet the conditions. *New York Times. —Aida Haddad, M.Div.*

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Brief19 is a daily executive summary of covid-19-related medical research, news, and public policy. It was founded and created by frontline emergency medicine physicians with expertise in medical research critique, health policy, and public policy.