BRIEF19

A daily review of covid-19 research and policy.

RESEARCH BRIEFING

A major clinical trial finds no benefit of hydroxychloroquine in treating covid-19.

A newly published study out of the United Kingdom has found that hydroxychloroquine is not effective in the fight against covid-19. The study was performed by the RECOVERY research team, the same collaboration that published the groundbreaking randomized clinical trial on the use of dexamethasone in covid-19, the first treatment shown in a clinical trial to improve mortality among patients who required oxygen or mechanical ventilation (though no benefit was found in patients without those needs, with a suggestion of potential harm among those patients). This new randomized clinical trial was conducted across 176 hospitals in the U.K. Patients included in the study were diagnosed with SARS-CoV-2 infection and the primary outcome of interest was mortality after 28 days. A total of 1,561 and 3,155 patients were randomized either to hydroxychloroguine (HCQ) plus standard-of-care treatments (such as oxygen as needed, and other non-specific supportive treatments) or standard-of-care treatment only, respectively. The results of the study were sobering. The mortality rate from covid-19 was 26.8 percent in the HCQ group and 25 percent in the standard-of-care group—which was not a statistically significant difference. Not only did a quarter of subjects die, but HCQ provided no mortality benefit. Interestingly, those who received HCQ had longer lengths of stay in the hospital and were also more likely to reach what researchers call a "composite endpoint," of two outcomes (in this case the need for mechanical ventilation or death) when compared to patients who did not receive HCQ (29.8 percent vs. 26.5 percent; with a risk ratio 1.12. (Risk ratios refer to the probability of a certain outcome in one group compared to the probability of the same outcome in another group, in this case, receiving HCQ or not) The statistical analysis suggests that the researchers can be 95 percent confident that the true number is somewhere between 1.01 and 1.25. The one silver-lining of the study is that high-doses of HCQ did not confer an excess risk of side effects (i.e., new major cardiac arrhythmia, which is a known risk associated with the medication).

There are a few major takeaways from this study. First, this study represents the largest and most important randomized clinical trial on the use of HCQ in hospitalized covid-19 patients to date. Patients receiving HCQ were randomized to the drug or not, whereas in previous observational studies (in which researchers looked back at charts of previous cases) sicker patients were often exposed to HCQ, thereby introducing selection bias (in other words, it is possible that patients who received HCQ in those studies fared worse because they were more seriously ill at the outset). In the final analysis, these new results from the RECOVERY study highlight a lack of mortality reduction among patients who received HCQ, and an apparent association with (if not a direct cause of) increased hospital lengths of stay and the need for mechanical ventilation. The argument for HCQ use in covid-19 is quickly dying.

POLICY BRIEFING

HHS pledges \$4 billion to healthcare providers

The Department of Health and Human Services (HHS) has <u>announced</u> an additional \$4 billion in funding to safety net hospitals through its Health Resources and Services Administration. After an initial \$10 billion dedicated to funding safety net hospitals was found to have excluded over two hundred qualified facilities, HHS issued new application criteria along with \$3 billion to support these centers. Official documents show that the original fund supported approximately 730 facilities, with the goal of this new infusion of bringing the total to 959.

A separate fund had previously been established to support rural hospitals, clinics, and health centers. HHS has now allocated an additional \$1 billion to this effort, as well as modified payment criteria to include special Medicare rural designation hospitals in rural areas and other centers that provide care in small, non-rural areas. HHS estimates that these funds will support an additional five hundred facilities across the country who are battling the pandemic. *The Department of Health and Human Services*

—Joshua Lesko, MD

Covid-19 and mental health.

As the American public listens to extensive non-stop media coverage about covid-19, while sifting through piles of misinformation and battling an economic downturn, it is no surprise that anxiety and depression are on the rise. Mental health crises have become the underlying pandemic beneath the pandemic. In the United States, approximately 20 percent of the population will have some form of mental health problem per year; only half will receive treatment. A poll conducted by the Kaiser Family Foundation revealed that 56 percent of adults in the United States have experienced negative impacts on their mental health as a result of the covid-19 pandemic. Black and Latinx individuals reported a slightly higher rate of mental health concerns, likely as a result of the disproportionate effect covid-19 has had in those communities. Healthcare workers were also noted to be heavily affected. As a result, online therapy platforms, crisis hotlines and mental health centers are experiencing record surges.

In spite of these numbers, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) <u>allocated</u> only a fraction of its funding to mental health efforts; \$425 million out of \$2 trillion. This has major implications for a country that is still learning what to do with its fragmented and overburdened mental health care system. *Various*.

—Onyeka Otugo, MD, MPH

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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.