BRIEF19

A daily review of covid-19 research and policy.

RESEARCH BRIEFING

Covid-19 cases are up in the United States. But where are the heart attacks? During the coronavirus crisis in the United States, many emergency departments have experienced lower overall patient volumes, despite ever increasing numbers of severe and critically ill patients who have been diagnosed with and treated for covid-19. There are several proposed explanations for the decrease in ER visits that have been reported all over the country. Some have noted that because of shelter-in-place orders and telecommuting mean that fewer accidents are taking place. But a decrease in the number of accidents is unlikely to account for all or even most of the drop in overall emergency medicine caseloads. This has led some to theorize that patients are now afraid to call for an ambulance and come to emergency departments for evaluation and care, even in the face of life or organ-threatening illness. A new study soon to be published in the Journal of the American College of Cardiology appears to support that suspicion. Researchers at nine "high volume" cardiac catheterization laboratories in the United States found that the there was a 38% reduction in acute heart attacks that met criteria for immediate cardiac catheterization (what physicians refer to as "STEMIs," or ST-segment elevation myocardial infarctions). Patients having these "classic" heart attacks need to have their coronary arteries assessed immediately. In many cases stents are placed in order to prop open a blocked vessel. Similar reductions in heart attack treatment has been reported in Spain during the SARS-CoV-2 pandemic. The explanations for these findings are unclear. Some of it may be patients avoiding care. Some of it may be that physicians are opting for alternative and less invasive treatments--including medicine-based therapies that are effective, but not as effective as cardiac stenting. More research is required. It will be interesting to see whether similar findings have been observed for other important conditions such as stroke. --Jeremy Samuel Faust MD MS

Early New York Hospital data emerges. In a correspondence to the New England Journal of Medicine, physicians at two affiliated New York City hospitals describe their early experience with covid-19. In some ways the description of patients matches previous observations from cohorts in Wuhan city and Hubei province in China. Pre-existing medical conditions such as high blood pressure and diabetes were common. While thus far 10.2 percent of the hospitalized patients have died, the researchers note that testing was quite limited during the time that these first 393 patients were evaluated and treated. Male sex (61%) and obesity (36%) were common. As in other patients around the world, a low number of white blood cells was often observed. Mechanical ventilation (intubation) was required in 33.1 percent of patients. However, one third of those patients are now "extubated," meaning they are breathing on their own without the aid of machines. This is a far higher rate of success than many other studies. The reasons for this are unclear, but may reflect differences in patient populations.

--Jeremy Samuel Faust MD MS

POLICY BRIEFING

A call to resume visa processing for foreign physicians. The J-1 visa allows foreign physicians to train at United States residency programs. Normally, after completion of training, these doctors must return to their home country for two years before reapplying for a visa or a green

card. Since 1994, however, the Conrad 30 program has allowed these physicians to remain in the US as long as they agree to practice in medically-underserved areas for three years. It is estimated that over twenty million Americans live in such areas, with a provider-to-patient ratio of one to 3,500, in the best of times. On March 20, the US Citizenship and Immigration Services (USCIS) announced a suspension on premium processing of all employment-based visas, including the J-1. In response, a bicameral, bipartisan group of members of Congress have sent a letter to USCIS Acting Director Ken Cucinelli asking him to resume processing in order to prevent further shortages of medical care, especially in light of the anticipated rise in rural covid-19 cases. *The Office of Senator Amy Klobuchar*.

--Joshua Lesko, MD

Emergency use authorization leaves quality by the wayside. One way that the Food and Drug Administration has been dealing with the covid-19 pandemic is by issuing emergency use authorizations (EUA) for different devices. Examples include ventilators, testing swabs, and antibody testing. An EUA allows a product to enter the marketplace without having to go through standard testing usually required of new products. The benefit is that new products get to market sooner. The downside is that scientists and researchers may not have not fully validated the accuracy or safety of these products. Over the course of the pandemic, the FDA has approved over ninety covid-19 antibody tests. Knowledge of people's immunity status against SARS-CoV-2 has been billed as essential to opening up the country. However, emerging evidence shows that these new antibody tests are variable and unreliable. It is unclear whether some or all of these tests would meet normal FDA guidelines. What is clear, though, is that re-opening the country based on inaccurate testing could prove very dangerous. New York Times.

More aid coming soon. The government initially passed three stimulus bills that were intended to bolster the economy for up to ten weeks. Highlights included checks to taxpayers, forgivable loans to small businesses, and direct support to hospitals. The small business loans ran out after one week, and many loans went to large publicly traded corporations like Ruth's Chris Steakhouse. As a result, several small businesses are still struggling and in need of support. Yesterday, the White House and Democrats announced that they were closing in on a deal that would lead to another stimulus bill. The bill aims to replenish the small business funding, increase direct aid to hospitals, and to support cities and towns as they battle covid-19 within communities. New York Times.

--Kimi Chernoby, MD JD, Policy Section Editor.

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http://www.brief19.com/ Twitter: @brief 19 <u>submissions@brief19.com</u> 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.