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BRIEF19

A daily review of covid-19 research and policy.

RESEARCH BRIEFING

Were there fewer strokes during the early covid-19 pandemic?

In a recent [research correspondence](#) published by the *New England Journal of Medicine*, investigators looked at the results of CT scans and MRIs of the brain obtained between July 1, 2019 and April 27, 2020 to assess whether there was a change in how commonly stroke evaluations occurred during the early phase of the covid-19 pandemic in the United States. Based on data from 231,753 patients across 865 hospitals, the number of patients who underwent imaging for suspected stroke (defined as non-contrast CT or MRI of the brain, CT or MR perfusion of the brain, or CT or MR angiography of the brain) dropped by 39 percent, or 1.2 patients per day per hospital during the pre-pandemic period compared to 0.7 patients per day during the pandemic. By using stroke imaging as a proxy for the number of patients suspected of having a stroke, it appears there was a dramatic drop in the number of stroke evaluations during the height of the early U.S. outbreak. Overburdened emergency response systems, patient fears of possible disease transmission, and reduction in available resources all may have contributed to this. It is also possible that fewer strokes occurred during the shutdown. Other conditions including the rates of premature births decreased during the shutdown, though the reasons why are unknown. One fear is that strokes still occurred at normal rates but people were scared of covid-19 exposure at hospitals and therefore did not call 911. The study therefore raises concerns with regards to the collateral effect of coronavirus on the broader acute care medical system. The direct and indirect effects of the pandemic are just beginning to be understood; unfortunately many emergency and other acute care services have been affected.

That said, this study has some important drawbacks that potentially limit its applicability. The number of CT and MRIs are what physicians and researchers refer to as a “surrogate marker.” The number of suspected strokes can reasonably be inferred from the decreased rates of brain imaging that the researchers found, but they are not a direct measure of strokes themselves. For example, it could be that during the pandemic, patients who physicians felt had a very low probability of having had a stroke, and who might normally have had an MRI right after having a normal CT scan “just to be safe” did not receive such radiographic scans. During covid-19, many emergency departments have deviated from their normal stroke evaluation workflow in order to decrease patients’ exposures to high risk facilities within hospitals. Additionally, the database used in the study only assessed hospitals which are considered to be “designated stroke centers,” which include endovascular thrombectomy capabilities (minimally invasive procedures which remove large blood clots that cause some important strokes). This means the data reported in this new study are not completely generalizable to all hospitals across the country, nor around the world.

—Bernard P. Chang, MD PhD

Reality star turned President uses hydroxychloroquine falsehoods to distract.

Editor’s note: Yesterday, the President of the United States made [false statements](#) about the effectiveness of hydroxychloroquine for treating covid-19. The Food and Drug Administration granted an emergency use authorization for the drug in March but has since rescinded it. Unfortunately, every clinical trial assessing hydroxychloroquine has [failed](#) to find a

benefit. A number of low-quality chart reviews (i.e. not trials) have yielded conflicting results, which is common among studies that assess old medical charts but did not randomize patients to test a particular treatment. Such studies are by definition inferior to randomized trials like the ones designed to either prove or [disprove](#) hydroxychloroquine's effectiveness for [preventing](#) or treating covid-19. Further, there is no evidence that any feature (or missing feature) of these trials has "stacked the deck" against the drug. Tests of hydroxychloroquine have simply failed to yield remotely favorable results. President Trump's continued obsession with the drug is therefore difficult to understand, other than as a distraction from other policy failures. Mr. Trump graduated from college with a degree in economics. Prior to becoming the 45th President of the United States, Mr. Trump was the producer and star of NBC's *The Apprentice*, from 2003-2015.

—Jeremy Samuel Faust, MD MS

POLICY BRIEFING

Comment period open for Right to Try Act. SARS-CoV-2 vaccines may be affected.

In an attempt to better understand off-label medication use, the Food and Drug Administration (FDA) has [proposed](#) a March deadline for pharmaceutical companies to submit documentation under the Right to Try Act. This legislation, passed in 2018, allows patients in certain circumstances to request access to medications that have not otherwise been approved, as long as the manufacturer provides data annually about the intended use. The information required includes the number of doses supplied, the number of patients treated, the purpose for which the drug was given, and any adverse side effects. While not specifically stated in this ruling, the timeline will allow reporting on developing vaccines and interventional therapies being developed as part of the covid-19 response. A public comment period, required for such federal rules, is now open. *The FDA*.

—Joshua Lesko, MD

CDC releases school reopening statements. No specific guidelines provided.

After initially delaying the release of its school reopening guidelines under reported pressure from the White House, the Centers for Disease Control and Prevention (CDC) has [published](#) the new recommendations. Without specifically recommending re-opening, the document strikes a pro-opening tone, citing the decreased rate of infection and mortality among children, as well as the emotional and behavioral harm incurred by school closures, especially for underprivileged children or those with disabilities. The paper discusses reports low rates of transmission between student and teacher, with the important caveat that this has only been demonstrated in areas with low community transmission. The argument for re-opening focuses on the role in-person education plays in student education, safety, nutrition, and physical activity. Missing from this document, unfortunately, are any concrete steps or recommendations for how schools can achieve safe reopening, from use of social distancing to sanitization procedures. *The Centers for Disease Control and Prevention*.

—Joshua Lesko, MD

*Kimi Chernoby, MD, JD, Policy Section Editor. Joshua Niforatos, MD Research Section Editor
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Twitter: [@brief_19](#)

submissions@brief19.com

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.