BRIEF19

A daily review of covid-19 research and policy

RESEARCH BRIEFING

Did early school closures save lives? New data suggests they did. But just how much?

School have been a very heated topic. When it comes to re-opening schools, teachers rightfully feel that they deserve protection (if not vaccine-acquired immunity) before resuming instructing classrooms full of children from whom they could acquire covid-19 from. Parents are struggling with educating their children virtually, especially parents who work essential jobs and cannot afford to consistently watch their children at home. Children themselves are suffering from the lack of socialization and observation outside the home. Speedily getting children back to school will likely require mass vaccination of teachers as kids themselves will be last in line for vaccine acquisition. But when to close a school is a different decision than when to open one. If schools are open when very little virus is circulating within the broader community, policymakers still have to know under what circumstances closing them would be important in order to keep everyone safe.

A [new paper](#) in *JAMA Pediatrics* examines if school closures early in the US breakout were in part responsible for a drop in mortality from covid-19. Of interest the study compares school closures with other legal and behavioral changes that were being promoted at the beginning of the pandemic including: personal hygiene measures, in-person work reduction, restaurants closures, bans on large gatherings, and stay-at-home orders.

Looking at behavioral changes of an entire population is difficult. Rolling out a policy is not the same as individuals choosing to be adherent to them. Accordingly, the researchers used statistical modeling relying on Google searches, examination of online restaurant reservations and other "non-pharmacologic interventions," or NPIs.

The researchers found that had schools closed two weeks later during the initial US outbreak would have prevented 587,000 coronavirus cases and approximately 23,000 deaths 60 days later. However, implementing the other NPIs two weeks later was estimated to have prevented 4.3 million cases during that time and saved a projected 140,000 lives. The combination of closing schools and implementing these NPIs two weeks later was projected to have prevented 10 million cases and 280,000 deaths, in that brief period alone.

That said, the statistical approach here may not be entirely ironclad. The researchers did not survey people; rather they monitored big-data proxies for people and their behavior. While some of this is very accurate, we don't know the distribution. It could be that modified behaviors among a small number of people could have had an outsized effect. Conversely, we don't know how good adherence to NPIs must be in order to "break the circuit" of transmission in a meaningful way.

One thing this article does indicate is that NPIs (like restaurant closures) apparently had a bigger effect than school closures. This underscores the position that schools should be the last to close and the first to open.

—Joanna Parga-Belinkie, MD

SPECIAL POLICY BRIEFING

Editor's note: Here at Brief19, we are committed to fighting medical disinformation, one briefing at a time. But what are the heavy-hitters of the internet and social media space doing to stop harmful stories from going viral? To learn more, we invited two Misinformation Policy Managers at Facebook to brief us on what they are doing to promote reliable health, science, and medical information during the pandemic. — *Jeremy Samuel Faust MD, MS*

Facebook's approach to covid-19 and vaccine misinformation.

Since covid-19 was declared a public health emergency almost a year ago, Facebook has been working to connect people to reliable information and limit misinformation about the pandemic. We have recently expanded these efforts to address concerns around vaccine hesitancy and covid-19.

A key part of our strategy to combat misinformation is to promote authoritative information. We have connected over 2 billion people from 189 countries to information from the World Health Organization (WHO) and other health authorities through our COVID-19 Information Center and messages in people's feeds. Facebook is now running the largest worldwide campaign to promote authoritative information about covid-19 vaccines, including promoting authoritative results in searches and giving $120 million in ad credits to national health ministries, NGOs, and UN agencies.

Connecting people to reliable information is only half the challenge. To limit misinformation, our covid-19 policies aim to minimize health harm while still allowing people to discuss, debate, and share personal experiences, opinions, and news. We remove content with claims that health authorities have confirmed are both (a) false and (b) would likely contribute to imminent physical harm—including increased likelihood of exposure to or transmission of the virus, or adverse effects on the public health system. For example, "vitamin C cures COVID-19," or "hospitals kill patients to increase their COVID numbers!" We also may remove Pages, Groups, and Instagram accounts that repeatedly share such information.

Building on these policies, we are now removing more misinformation to address vaccine hesitancy during the pandemic. Since December, we've removed false information about covid-19 vaccines, including claims that they contain a microchip, change DNA, or were designed for population control. Earlier this month, following consultations with health organizations like the WHO, we began removing additional debunked theories about vaccines in general, including claims that they are toxic or cause autism. We also began removing other common covid-19 hoaxes debunked by multiple of our independent fact-checking partners, including that covid-19 is man-made, patented, or not new.

For other content, we reduce distribution of posts rated false by one of our 80-plus independent fact-checking partners (covering over 60 languages), and we display a warning label with more context, prohibit it in ads, and further restrict repeat offenders. Under these policies, between March and October 2020, we removed more than 12 million pieces of content on Facebook and Instagram and displayed warnings on about 167 million pieces of content on Facebook. Expanding these efforts will help us continue to take aggressive action against misinformation about covid-19 and vaccines. As the situation evolves, we'll continue to review content on our platforms and engage with experts to provide additional policy guidance.

— *Aaron Berman and Krista Cox, Misinformation Policy Managers, Facebook*