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BRIEF19

A daily review of covid-19 research and policy

RESEARCH BRIEFING

Vaccine hesitancy among healthcare workers lowered over time, followed emerging evidence, FDA policy, and media coverage of rollouts.

As coronavirus vaccines went from theory to reality, many looked to the response of healthcare workers in formulating their own opinions. After all, healthcare workers were in the best position to evaluate the evidence and also given the first opportunity to line up (or refuse) inoculations. When videos of healthcare workers proudly receiving their vaccines went viral, it sent a strong message to the public: vaccinations are effective and worth celebrating.

But how did healthcare workers themselves arrive to these conclusions? A [new study](#) in *JAMA Network Open* tracked vaccine interest among over 16,000 US healthcare workers over time and reported reasons for hesitancy.

The first surveys were obtained on December 4th 2020, just a few weeks after the Pfizer and Moderna data were announced in the media, though prior to the publication of the full clinical data. At that point, a little under 60 percent of healthcare workers responded that they intended to get vaccinated, around 25 percent reported being undecided, and approximately 15 percent said they did not intend to get vaccinated. However, a week later, the US Food and Drug Administration voted to recommend emergency use authorization, and national public communications campaigns were launched. Rates of intent to vaccinate rose to over 60 percent by the time the FDA announced authorization on December 11. As the media covered images of vaccines in trucks and healthcare workers getting vaccinated, rates rose further, to well above 80 percent as solid “yes” to vaccination, and most of the remaining undecided. By the end of the survey period (December 22), over 90 percent of healthcare workers stated they would be vaccinated, and a majority of the remaining people were undecided, with just 0 to 3 percent saying “no.”

It’s impossible to make a statement about causation here, but prior to the FDA’s first emergency use authorization, interest had fallen to below 50 percent. But after the announcement, the number in the “yes” column shot up to over 80 percent, and rose from there, with more people saying yes, and the number of hard “no’s” dropping rapidly. That change also corresponded with the availability of FDA documents, which provided troves of data which were widely parsed and discussed by commentators and experts.

The researchers reported on some of the most common reasons given for vaccine hesitancy. Here are the top 10 in order of frequency; 1. Unknown risks; 2. Adverse effects (such as headache and fatigue); 3. “Want to wait and see.”; 4. FDA process rushed/don’t trust results; 5. Privacy concerns; 6. Concerns about a particular kind of product (such as mRNA vaccine). 7. Not at high risk for serious covid-19 disease; 8. Not at high risk for SARS-CoV-2 infection; 9. Already had covid-19 (note: an inaccurate reading of the evidence, as prior infection is not sufficiently protective so as not to require vaccination); 10. Concerns around pregnancy or breastfeeding.

Whatever the reasons, the numbers headed in the right direction. However, in most healthcare institutions, universal vaccination among healthcare workers has not been achieved. The question as to whether hospitals themselves have inoculated enough of their employees to essentially reach internal herd immunity among employees is difficult to measure, especially since the patients themselves often bring the virus to the hospital.

—Jeremy Samuel Faust, MD MS

Shelter-in-place and weight changes. Did people gain or lose a few?

When shelter-in-place orders became the norm approximately one year ago, our lifestyles changed dramatically. On one hand, we were more sedentary. On the other, we ate out less often. Gyms were closed, but home exercise equipment was suddenly so popular, that bikes, weights, and other staples of the home fitness room were nearly impossible to find in stores or online. That said, large datasets have reported that average step counts went down during the early pandemic period. In sum, we do not have a full view on how habits changed for the better or worse during the shelter-in-place period in the US.

A new study in *JAMA Network Open* [tracked the weights](#) of volunteers over time, using Bluetooth-equipped scales. From February until June, 269 participants provided thousands of weight measurements. When the shelter-in-place began, the entire cohort was actually already around a quarter pound lower than their own average. (This may be because in the early part of each year, average weights drop in enough people due to New Years resolutions that it shows up in data like these). However, as the shelter-in-place went on, weights crept up, at around 0.60 lbs for every 10 days.

These findings may understate the case. People who weigh themselves often (i.e. such as those in this study) may be more likely to make small behavioral changes in response. Also, the health implications of small and short-term weight gains are unclear. While the usefulness of metrics like weight and body mass index have been debated, there are [data](#) that show that to some degree, these numbers have some correlation with health outcomes.

—Jeremy Samuel Faust, MD MS

POLICY BRIEFING

CDC Director Warns the US Could See Another “Avoidable Surge”

US Centers for Disease Control and Prevention Director Dr. Rochelle Walensky warned on Monday that the United States could see “another avoidable surge” of covid-19 if mitigation measures such as mask wearing, physical distancing, and avoiding crowds or travel aren’t followed. Walensky said, “As I’ve stated before, the continued relaxation of prevention measures while cases are still high and while concerning variants are spreading rapidly throughout the United States is a serious threat to the progress we have made as a nation.”

While the Biden Administration marked 100 million coronavirus vaccine doses administered just 58 days into his presidency, the US is still averaging around 53,800 new cases per day, a slight increase from the previous seven-day average of cases nationwide. The CDC director said that the leveling off of cases following declines last month and that the spread of new contagious variants is “very concerning.” Walensky noted that “Increasingly, states are seeing a growing proportion of their COVID-19 cases attributed to variants.”

The Biden Administration is thus encouraging governors, as well as the private sector, to maintain or reimpose at least some coronavirus restrictions, with the relaxation of certain covid-19 restrictions seen as posing a particularly “serious threat” to the progress the US has made in containing the virus. Walensky’s remarks come after several states lifted mask mandates and allowed the reopening of businesses at full capacity.

—Miranda Yaver, PhD