Health Care Worker SARS-CoV-2 Infection Is Flying Under the Radar

A high percentage of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infections among health care workers appear to go undetected, often because they have mild or no symptoms and workplace testing isn’t sufficient, investigators from a multistate hospital network reported.

The study was conducted by the Influenza Vaccine Effectiveness in the Critically Ill (IVY) Network, a collaboration of US medical centers that studies influenza and coronavirus disease 2019 (COVID-19). The network enrolled 3248 clinicians who regularly cared for patients with the disease between April and June at 13 of the network’s medical centers located in 12 states.

Overall, 194, or 6%, of the participants tested positive for antibodies to SARS-CoV-2. Among them, 69% reported that they had never been diagnosed with COVID-19, 29% didn’t recall having any symptoms during the previous few months, and 44% didn’t suspect they’d had the disease.

About 90% of the participants reported always wearing a surgical mask, N95 respirator, or powered air purifying respirator while caring for patients. The clinicians who did so were less likely to test positive for SARS-CoV-2 than clinicians who didn’t use face coverings during all patient encounters. Personal protective equipment (PPE) shortages were reported by 12% of participants. The clinicians who were short of PPE were more likely to test positive than those with sufficient supplies.

“Consistent with persons in the general population with SARS-CoV-2 infection, many frontline [health care personnel] with SARS-CoV-2 infection might be asymptomatic or minimally symptomatic during infection, and infection might be unrecognized,” wrote lead author Wesley Self, MD, associate professor of emergency medicine at Vanderbilt University, and his colleagues. “Enhanced screening, including frequent testing of frontline [health care personnel], and universal use of face coverings in hospitals are two strategies that could reduce SARS-CoV-2 transmission.”

Shifting Hydroxychloroquine Patterns Raise Concern

The number of hydroxychloroquine prescriptions by specialists who don’t typically prescribe the drug skyrocketed after preliminary reports in March suggested potential benefits for patients with coronavirus disease 2019 (COVID-19).

CDC investigators analyzed hydroxychloroquine and chloroquine prescriptions dispensed by US retail pharmacies from January through June 2019 and during the same period in 2020. Prior to 2020, the drugs were prescribed most often by primary care physicians or specialists like rheumatologists or dermatologists for autoimmune disorders or as malaria prophylaxis.

However, the analysis showed that prescriptions written by specialists who don’t typically use the drugs rose to 75,569 in March 2020 from 1143 in February 2020—an 80-fold increase compared with March 2019. Among specialists who don’t routinely prescribe hydroxychloroquine and chloroquine, the greatest growth in outpatient prescriptions in March 2020 was in the fields of ophthalmology, anesthesiology, and cardiology.

The investigators also documented unusual prescribing trends. Women, who account for 78% of patients with autoimmune diseases, received 81% of new hydroxychloroquine or chloroquine prescriptions in March and April 2019. A year later, men received about 40% of new prescriptions during those months.

The changes in prescribing led to shortages of the drugs and made it difficult for patients taking the drugs for chronic diseases to obtain them despite limited evidence of benefit for COVID-19.

“Although dispensing trends are returning to prepandemic levels, continued adherence to current clinical guidelines for the indicated use of these medications will ensure their availability and benefit to patients for whom their use is indicated, because current data on treatment and pre- or postexposure prophylaxis for COVID-19 indicate that the potential benefits of these drugs do not appear to outweigh their risks,” the authors wrote. – Bridget M. Kuehn, MSJ

Note: Source references are available through embedded hyperlinks in the article text online.