Substance Use Disorders and COVID-19 Vaccine Response

Among individuals fully vaccinated against COVID-19, those with substance use disorders (SUD) may have a higher risk of becoming infected with SARS-CoV-2, according to a recent study led by researchers at the National Institute on Drug Abuse and Case Western Reserve University.

Analyses conducted earlier in the pandemic, before vaccines became available, found that people with SUD had an increased risk of becoming infected with SARS-CoV-2 and were more likely to be hospitalized and die of COVID-19.

The vaccine clinical trials didn’t specifically include people with SUD, many of whom have compromised immune systems because of their drug use and comorbidities. Researchers hypothesized that people with SUD might not respond as well to immunization as individuals with healthy immune systems.

The authors of the new study analyzed electronic health records for nearly 580,000 people in the US, approximately 30,000 of them with an SUD diagnosis, who were fully vaccinated between December 1, 2020, and August 14, and hadn’t been infected with SARS-CoV-2 before their vaccination.

The study found that the risk of SARS-CoV-2 infection in vaccinated people with SUD ranged from 6.8% among those with tobacco use disorder to 7.8% for cannabis use disorder—significantly higher than the 3.6% risk among vaccinated individuals without SUD. After accounting for demographics and vaccine brand, infection risk was still significantly higher among vaccinated people with SUD, except for those with tobacco use disorder, than among vaccinated individuals without SUD.

This was largely due to the higher prevalence of comorbidities and adverse socioeconomic determinants of health among people with SUD, compared with people who don’t have SUD, the researchers wrote in World Psychiatry. Unlike their previous study conducted early in the pandemic, the authors didn’t find significant age, gender, or racial and ethnic disparities in COVID-19 risk among vaccinated people with SUD.

Support for Primary Care Clinicians in Underserved Areas

The US Department of Health and Human Services (HHS) recently announced that it will provide $100 million for state-run programs that support, recruit, and retain primary care clinicians who live and work in underserved communities.

All 50 states, Washington, DC, and US territories can apply for the grants funded by the American Rescue Plan. The Health Resources and Services Administration (HRSA) estimates that it will award up to 50 grants, for as much as $1 million each, for each of the program’s 4 years. Although HRSA encourages states to secure matching funds, it isn’t required. In addition, states can use up to 10% of their award to cover administrative costs.

“Their states may be at higher risk of SARS-CoV-2 infection even if they’re fully vaccinated,” HRSA Administrator Dr. Rachel Espinosa said in the HHS announcement. “This investment will make a tremendous impact on access to primary care and addressing health disparities at a critical time.”

The deadline to apply for the grants through HRSA’s Bureau of Health Workforce is April 8, 2022; the project start date is September 1, 2022.

The Cost of Rare Diseases

Although research on the costs of rare diseases is limited, in part because they’re difficult to diagnose, the available evidence suggests the toll can be substantial, according to a recent Government Accountability Office report.

A rare disease is usually defined as one that affects fewer than 200,000 people in the US. They number about 7,000 conditions, an estimated 80% of which are genetic, and are often chronic, progressive, and life-threatening, the report said. Some rare diseases may be diagnosed quickly, but in other cases it can take years, during which time misdiagnoses frequently lead to unwarranted and harmful treatments, the report noted.

Besides their impact on mortality, morbidity, and use of health care services, rare diseases often disrupt work and school and can create financial hardships for patients and their families, according to the GAO.

A recent study that hadn’t been peer-reviewed estimated that the cost of rare diseases, including medical, nonmedical (such as transportation to medical appointments), and indirect costs (such as loss of income from being unable to work), totaled $966 billion in 2019 for 15.5 million people in the US who had at least 1 of 379 rare diseases, the GAO reported. The costs are incurred by patients and their families, insurance companies and government health care programs, the federal government, or combinations of them.

To prepare the report, the GAO reviewed documents from the National Institutes of Health and the US Food and Drug Administration. GAO staff also interviewed officials from those agencies; researchers and experts on rare diseases, health care, and health economics; and leaders of organizations that represent people with rare diseases, including the Aneurysm and AVM (arteriovenous malformation) Foundation, the Ehlers-Danlos Society, and the National PKU (phenylketonuria) Alliance. – Rita Rubin, MA

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