

The Impact of the COVID-19 Pandemic on Patients with Substance Use Disorders

Author : Dr. Anish Shah, MD , Project Director (Project Hope), Tiffany Morgan, MA Project Manager (Project Hope)

The COVID-19 pandemic has us all reeling, and a lot of people are facing unexpected challenges. Unfortunately, people in recovery from substance use disorders are disproportionately affected, and those who rely on opioid replacement therapy (ORT) to manage opioid addiction will face additional risks and challenges as society learns how to adapt to the pandemic.

Background

To understand the potential consequences of COVID-19 on people with substance use disorders, it might be helpful to understand some of the things that happen in the brain during addiction. And, although coffee isn't a drug of abuse, it has some very similar effects that most people will be familiar with, so it's a useful analogy.

Do you remember the first time you had coffee? If you were like me, you were bouncing off the walls. Now, lots of us need a cup or two every morning to get out the door. Some of us might even get a headache if we don't have our coffee.

When we need to drink more coffee to get the same effect, we've developed tolerance. And if we get a headache without coffee, it's because our brains have become dependent on caffeine and without it we have caffeine withdrawal. These symptoms, tolerance, dependence, and withdrawal, are hallmarks of addiction.

Drugs of abuse hijack the reward system, which releases dopamine in response to pleasurable stimuli. Normal stimuli (food, water, sex) cause some dopamine to be released, and the brain remembers that those are good things. Drugs of abuse cause dopamine to flood the brain, which leads the brain to incorrectly deduce that the drug has a *really* positive effect on health and wellbeing.

With regular drug use, addiction can become impossible to manage. Opioids (e.g. heroin, oxycodone, fentanyl), alcohol, benzodiazepines, cocaine, and nicotine are among the most challenging drugs to quit, and withdrawal symptoms can persist for months, even years after someone quits. For many people, relapses aren't driven by a desire to use; rather, a desire to avoid withdrawal symptoms is the primary motivator.

People who are in recovery from substance use disorders often find support and solidarity by participating in treatment groups and 12-step programs. These programs can't make withdrawal any less miserable, but when people who are going through withdrawal are surrounded by peers who understand what they're going through, it can make the process a little less daunting.

Does substance use increase COVID-19 risks?

We're still learning how coronavirus interacts with substance use disorders, but evidence suggests that people with respiratory damage or disease are at increased risk for serious, even life-threatening COVID-19 symptoms. Smoking, vaping, and inhaling other drugs exposes delicate respiratory tract tissues to harmful chemicals. When someone with smoking-related respiratory tract damage gets COVID-19, their lungs are less able to manage and recover from the virus [2].

People with opioid use disorder face a different kind of risk when they get COVID-19. Opioids act by slowing brain function in certain areas, including the part of the brain that controls breathing. Since chronic respiratory disease impairs lung capacity, someone who uses opioids is at risk for dangerous respiratory depression (slow, irregular breathing). Experts believe that COVID-19 will similarly increase the risk for potentially fatal overdoses [2].

How is COVID-19 affecting people with substance use disorders?

Because it attacks the lungs, the coronavirus could be an especially serious threat to those who smoke tobacco or marijuana. People with methamphetamine use disorder may also be vulnerable due to its effects on respiratory health.

The other impact Additionally, individuals with a substance use disorder are more likely to experience homelessness or incarceration than those in the general population, and these pose unique challenges regarding transmission of the Corona Virus to law enforcement officials and jails. (8)

Although many treatment centers currently remain open for limited business, the requirement for social distancing makes getting care challenging. Treatment groups that may normally have a couple dozen participants are now limited to 9 patients and a counselor. Many therapy groups and 12-step programs have suspended meetings altogether, leaving members without support. For some people, this will dramatically increase the risk that they will relapse.

People who want to start treatment face new barriers to care as well. Rehab facilities that used to admit new inpatients regularly are now offering intensive outpatient and telehealth treatment almost exclusively [3].

Why are people with OUD most disproportionately affected?

Among drugs of abuse, opioids like heroin and oxycodone are singularly addictive and notoriously hard to quit. In some cases, debilitating withdrawal symptoms can persist for years, making long-term recovery very challenging. Three highly effective FDA-approved medications are available to treat opioid use disorder (OUD): buprenorphine, methadone, and naltrexone [4]. However, access to these medications is strictly regulated by the federal government, and many patients who would benefit from a prescription are unable to get one.

Even before COVID-19, people in treatment for OUD faced daunting barriers to care. Federal regulations require that OUD be administered in the presence of a Drug Enforcement Administration (DEA)-licensed provider, meaning that most people make daily trips to the clinic to receive their treatment [5]. In addition, onerous restrictions on who can prescribe OUD mean that less than 7% of U.S. physicians currently have DEA waivers granting them permission to prescribe [6]. Consequently, there are about 1,250 opioid treatment programs that need to treat more than 350,000 people. *Every day.*

The COVID-19 pandemic is stressing already significantly overburdened opioid treatment programs, which will result in increased relapse rates, hospitalizations, and deaths caused by opioid use. A major risk of relapse is overdose, since people tend to administer the dose they were using when they quit. After even a short period of abstinence, tolerance drops, and opioids have more profound effects on signaling in the brain.

The government has slightly relaxed prescribing restrictions in light of COVID-19, and patients who are stable on OAT can now receive a 28-day prescription [7]. Less stable patients may be able to get 14-day prescriptions. This is a modest step in the right direction, but it still leaves hundreds of thousands of patients without adequate treatment. In the absence of drastic, immediate action by the government, we can expect to see opioid-related deaths increase as COVID-19 continues to wreak havoc on our social structure.

References

1. Stromberg, J. *This Is How Your Brain Becomes Addicted to Caffeine*. 2013 [cited 2020 April 2]; Available from: <https://www.smithsonianmag.com/science-nature/this-is-how-your-brain-becomes-addicted-to-caffeine-26861037/>.
2. *COVID-19: Potential Implications for Individuals with Substance Use Disorders*. Nora's Blog 2020 [cited 2020 April 4]; Available from: <https://www.drugabuse.gov/about-nida/noras-blog/2020/03/covid-19-potential-implications-individuals-substance-use-disorders>.
3. *Considerations for the Care and Treatment of Mental and Substance Use Disorders in the COVID-19 Epidemic*. 2020 [cited 2020 April 2]; Available from: <https://www.samhsa.gov/sites/default/files/considerations-care-treatment-mental-substance-use-disorders-covid19.pdf>.
4. *Information about Medication-Assisted Treatment (MAT)*. 2019 [cited 2020 April 2]; Available from: <https://www.fda.gov/drugs/information-drug-class/information-about-medication-assisted-treatment-mat>.
5. Levander, X.A. and S.E. Wakeman. *Covid-19 will worsen the opioid overdose crisis if we don't prepare now*. First Opinion 2020 [cited 2020 April 2]; Available from: <https://www.statnews.com/2020/03/17/covid-19-will-worsen-the-opioid-overdose-crisis-if-we-dont-prepare-now/>.
6. Fiscella, K. and S.E. Wakeman. *Deregulating buprenorphine prescribing for opioid use disorder will save lives*. 2019 [cited 2020 April 2]; Available from: <https://www.statnews.com/2019/03/12/deregulate-buprenophine-prescribing/>.
7. *Opioid Treatment Program (OTP) Guidance*. 2020 [cited 2020 April 2]; Available from: <https://www.samhsa.gov/sites/default/files/otp-guidance-20200316.pdf>.
8. COVID-19: Potential Implications for Individuals with Substance Use Disorders
<https://www.drugabuse.gov/about-nida/noras-blog/2020/04/covid-19-potential-implications-individuals-substance-use-disorders>