

REVIEW ARTICLE

Lessons Learned from a Pandemic: Covid-19 and Substance Use

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Main Points

- The COVID-19 pandemic is disproportionately affecting particularly vulnerable individuals who use drugs.
- Many experts suggest that the pandemic may contribute to a global rise in drug use disorders as individuals deal with the anxieties and uncertainties caused by the pandemic.
- Considering marginalization, social stigma, and inadequate access to health and social services, people with substance use disorders are vulnerable.
- During the pandemic, there are improvements in treatment processes, along with changing circumstances, telehealth has become much more important, and this is much more difficult for patients.

Abstract

The aim of this review is to investigate the effects of the pandemic on substance use disorders and psychiatric care. Coronavirus disease 2019 (COVID-19) is a severe respiratory syndrome caused by coronavirus 2 (SARS-CoV-2) and has become a global pandemic rapidly. As a result of anxiety and fear for their health and careers, and the life they are forced to live in an unfamiliar lifestyle, the condition of people with psychological issues may have deteriorated during the pandemic. Many experts suggest that the pandemic may contribute to a global rise in drug use disorders as individuals deal with the anxiety and uncertainty caused by the pandemic. Some studies show that over half of the participants either started using or increased the use of medications or substances, most commonly alcohol and sleep aids, as a result of the COVID-19 pandemic. The COVID-19 pandemic is disproportionately affecting particularly vulnerable individuals who use drugs. Together with other factors, both comorbid diseases in substance use disorders (SUDs) (especially cardiopulmonary diseases and associated risk factors) and drug-drug interactions (between abused substances or SUD treatment medicines and COVID-19 treatment drugs) can lead to further complications for people with SUDs when they experience a COVID-19 infection. Also, during the COVID-19 pandemic, some hospitals could not accept SUD patients; partial hospital programs have adjusted their enrollment criteria, denying or delaying acceptance. For these reasons, there have been changes in the treatment processes. Telehealth has become much more important. Telehealth, also often called as telemedicine, is characterized by telecommunications technology as the delivery of health care over a distance.

Keywords: COVID-19 pandemic, substance use disorders, telemedicine, substance abuse treatment centers, systematic review

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Introduction

Coronavirus disease 2019 (COVID-19) is an acute respiratory syndrome caused by coronavirus type 2 (SARS-CoV-2) and has rapidly become a global pandemic. COVID-19 pandemic is a global public health emergency. Globally, as of 29 November 2020, there have been 61,654,661 confirmed cases of

COVID-19 since the first day of its infection, including 1,444,596 deaths, reported to World Health Organization (WHO) during the pandemic (WHO, 2020). The disease spread rapidly across the globe owing to certain characteristic features of the virus (genetic diversity and the ability to mutate quickly, being highly contagious, and easy mode of spread) (Mackenzie & Smith, 2020).

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The Intersection of Substance Use Disorders (SUDs) and COVID-19

- Drug usage is often popular (e.g., exchanging blunts, smoking pipes, or syringes) and may lead to the spread of COVID-19 (Volkow, 2020).
- Many people with SUD have limited financial capital, poor housing, and limited access to clean water and soap, increasing their risk of infection (Harris, Scott, Hope, Wright, McGowan, & Ciccarone, 2020).
- Long-term struggles with SUD can lead to considerable modification and damages to multiple systems in the body, and one of the most important system is the immune system. The immune system can be harmed by intoxicating substances, or the way the drug is ingested may contribute to a higher risk of infection (Wei & Shah, 2020).
- More extreme COVID-19 signs, complications and fatalities and increased susceptibility to COVID-19 are linked to co-morbidities common among individuals with SUD (Wang et al, 2020).
- Public health precautions (i.e., physical distance, quarantine, and isolation) of COVID-19 may worsen loneliness, symptoms of mental wellbeing, symptoms of withdrawal, and psychological trauma (Venkatesh & Edirappuli, 2020).
- Mitigation acts by COVID-19 are likely to hinder access to SUD care centers (Volkow, 2020).

Pandemic Change Profile of Substance Use

A study among addiction medicine experts from 77 countries indicates that drug and alcohol prices have gone up and become less affordable, and elevated use of alcohol, hemp, prescription narcotics, and use of sedatives/hypnotics, and decreased use of amphetamines, cocaine, and opioids, elevated complications linked to drug and alcohol use, including increased use of morphologies. Patients with partially treated SUDs are at greater risk of relapse or self-overdose (Farhoudian et al., 2020).

In a study, over half of the participants either started using or increased the use of medications or substances because of the COVID-19 pandemic, most commonly alcohol and sleep aids. Over a third of the participants increased cannabis use, whereas 25% decreased its use. Approximately 40% of participants who increased or started use of medications/substances (other than cannabis) reported doing so because of changed access to medical cannabis (Boehnke et al, 2020).

The impact of the measures implemented to address the COVID-19 pandemic appears to have been most similar to date at the very end of the drug supply chain, in the destination markets. A lot of countries and states have reported an overall shortage of numerous types of drugs at the retail level, as well as increases in costs and decrease in the purity of substances, and as a result of all these conditions, drug users have been switching substance (for example, from marijuana to heroin) and/or increasingly accessing drug treatment (United Nations Office on Drugs and Crime [UNODC], 2020). This phenomenon, which emerged primarily in the major cities of northern Europe, has spread steadily throughout the continent and is now a troubling fact in Turkey and most countries. Nootropics and new psychoactive drugs are other growing phenomena in drug abuse (Ransing et al. 2020).

Substance Using People Are at the Risk of Psychological Problems

As a consequence of anxiety and fear for their wellbeing, their careers, and the life they are compelled to live in an abnormal environment, robbed of connections and even of the unconscious mirroring of other emotions, the situation of people with psychological problems may well have intensified during the pandemic (Orsolini et al., 2017).

This unusual situation may have driven more people into deviant conduct related to the use of legal or illegal drugs, and it may have been a great chance for drug dealers to draw new potential customers. Economic problems, nevertheless, have not favored the normal sector of business. Indeed, social distancing has greatly decreased drug trade on the streets, driving users, upon to dark web or through messaging apps, into illicit markets (Schifano et al., 2018).

In addition, the lack of conventional medications, along with the reluctance to go out to look for them, may have driven users to abuse psychoactive prescription medications such as benzodiazepines (Rinaldi et al., 2020).

In this regard, while there is insufficient empirical evidence, the effects of the COVID-19 pandemic may lead to significant changes in the habits of drug use and a heightened incidence of potentially harmful substance replacement, adulteration, contamination, and dilution. Data from forensic and toxicology laboratories are therefore essential for early uncovering and reaction to such occurrences ([UNODC], 2020).

In addition, users may no longer be searching for “socializing” substances to use in recreational environments during this time of home incarceration, but for psychotropic drugs to be taken in isolation (Zaami et al., 2020).

Considering marginalization, social stigma, and inadequate access to health and social services, people with SUDs are vulnerable. Individuals with SUDs can not only carry additional risks for COVID-19 but also experience poor performance, owing to risky activities and disadvantaged environments associated with SUDs. Therefore, it is important to collect current information on the status of SUD during the pandemic to facilitate preparation and mobilize timely responses to reduce risk (Farhoudian et al., 2020).

Alterations in the supply of alcohol and drugs can shift accessibility and usage patterns as a result. The COVID-19 outbreak has resulted, internationally, in control measures, travel bans, regulatory changes, and “lockdown” steps of social distancing, with effects on supply chains. Decline in the availability of drugs and alcohol, changes in value and usage patterns, and potential negative impacts on SUD presentations and care demands can occur in the setting of COVID-19- related stressors.

Such modifications may impact individuals with SUDs directly/indirectly and develop into new problems and additional needs in the field of psychiatry. Drug shortages, as stated by the UNODC, may have adverse health implications with regard to the shift to consumption of hazardous domestically manufactured substances along with more risky drug use trends, including the shift to injections and the use of shared drug administration devices, particularly in the case of heroin (Ornell et al, 2020).

In addition, the lack of availability of drugs will lead to higher prices for some substances and place a financial strain on drug users and increase the probability of risky/illegal behaviors. At the same time, as legal liquor stores in some nations may remain closed during the lockdown, certain issues may arise, varying from alcohol withdrawal to poisoning and death due to the consumption of low-quality homebrew alcohol and accidental ingestion of methanol (Delirrad & Mohammadi, 2020).

During the COVID-19 age, individuals with SUDs may also be exposed to some indirect risks (Volkow, 2020). When medical centers become more difficult to reach during lockdowns, for example, individuals with SUDs can encounter more issues with inadequate access to treatment facilities. Such issues may be compounded by socioeconomic disadvantages and decreased public transport availability, particularly for individuals receiving regular opioid replacement therapy prescriptions (Farhoudian et al., 2020). These emerging needs should be proactively addressed by trained agencies and health policy makers. The lack of accurate data, furthermore, complicates the production and implementation of evidence-based policies (Farhoudian et al., 2020).

Youth Substance Use, Epidemic Hidden in a Pandemic

That is what Andrea Raby, calls the threat to our youth who are now at increased risk of substance use disorder and overdose in the wake of the COVID-19 pandemic. "This is always a vulnerable time during this period in their growth, in their development, in their growth of their identity, and often times what helps our adolescent population is structure and predictability and of course with COVID, this renders everything the opposite". Transitioning to online classes, social lives at a standstill, cancelled athletics, and activities except the educational program, leave some teens looking for ways to numb the pain (Demarest, 2020).

The disappearance of many factors such as positive friends and school that can offer protection against substance use during the pandemic and the increase in triggering factors, such as anxiety, unhappiness, and uncertainty, is a situation that we need to be careful about for young people.

Many experts suggest that the pandemic will contribute to a national rise in drug use disorders as individuals deal with the anxieties and complications caused by the pandemic. As much as we want to assume that our young people are somehow shielded from these vices, no community is actually less susceptible. Unchecked, drug addiction in the youth will accelerate poor health outcomes and escalate to even worse adult habits. If no one addresses the issue early on, young people who are urgently in need of help cannot receive the treatment they need (Ingoglia, 2020).

A Canadian study on young substance use pre- and post-COVID-19 found that, "For most substances, the percentage of users decreased; however, the frequency of both alcohol and cannabis use increased. Although the greatest percentage of adolescents was engaging in solitary substance use (49.3%), many were still using substances with peers via technology (31.6%) and, shockingly, even face to face (23.6%)" (Dumas et al., 2020).

Covid-19 Affect Vulnerable Individuals

The COVID-19 pandemic is more intensely affecting African Americans and also Latinos, especially under-service people

using drugs in these communities. Often it stems from chronic health inequalities and fewer personal and community resources (Volkow, 2020).

The outbreak period of COVID-19 in urban greenhouses (homeless shelters) caused the governments to evict a large number of homeless addicts for a period of time and live in different areas in the city. The homeless are susceptible to COVID-19 infection due to the lack of appropriate health facilities and their socioeconomically disadvantaged backgrounds. Abandoned addicts also migrate and live in major cities, which can increase the prevalence of the virus dramatically. Residential care centers have not been embraced because of the spread of the disease. In the camps, families are worried about health conditions and are afraid to send their patients to these centers. Also, outpatient treatment facilities are seeing a big decline in referrals. In most centers, psychiatric therapy services were suspended and depending exclusively on the caregiver did not guarantee successful treatment (Pirnia et al., 2020).

People with SUDs are among those vulnerable to infection and its complications (Harris et al., 2020). Together with other factors, both comorbid health problems in SUDs (such as cardiopulmonary diseases and related risk factors) and drug-drug interactions (between COVID-19 drugs and abused substances or SUD treatment medicines) can lead to other problems for people with SUDs when encountering COVID-19 infections (Wei et al., 2020; Wang et al., 2020).

During the surge and reopening mental health (MH) and SUD visit changed. SUD with MH problems visits increased during the COVID surge, largely in primary care. But there is a decrease in visits for SUD to below pre-COVID-19 levels during the surge, and further still during initial partial opening period, is worrisome. In particular, it was found concerning disparities of care for patients with SUD, those who are racial and ethnic minorities, and patients from vulnerable, underprivileged populations (Yang et al, 2020).

Drug-using prisoners are not secure inside or outside the jail. This "paradox of jail" is a learning lesson during the pandemic. In the COVID-19 pandemic, prisoners with SUDs face severe obstacles. Urban sprawl and insufficient personal hygiene practices have subjected inmates to a greater risk of infection than the general populace (Council of Europe [CoE], 2020).

National authorities have made extraordinary measures to free inmates in more than 50 countries, as well as those arrested for drug-related offences. It presents many challenges. First of all, abrupt and unscheduled discharge will put inmates with opioid addiction at a greater risk of suicidal overdose and death. Time in prison, without access to medication, induces a quiet loss of opioid resistance. An overdose can result from a relapse of the pre-incarceration dose of opioids. Second, during the COVID period, sudden release and minimal functionality of community-based programs will make referrals and coordination difficult (Ghosh, 2020).

As a third aspect, in the midst of the epidemic era of the COVID-19 policy, freeing inmates seems to have appeased drug traffickers. Field reports suggest drug dealers' freedom of action.

Together with the Smart Smuggling System (telephone orders and motorized shipment of materials), the isolation of the streets has made it much easier than before to reach drug distribution centers (Pirnia et al., 2020).

Telehealth in Addictive Disorders

Telehealth, often also called telemedicine, is characterized by communication technologies as the healthcare delivery over a distance. Telehealth has been demonstrated to increase access to treatment (especially for rural populations) (Tuckson et al, 2017).

In SUD treatment services, the four most popular telehealth modes are computerized evaluations (45%), telephone-based rehabilitation assistance (29%), telephone-based counseling (28%), and video-based counseling (20%). Messaging, mobile applications, and interventions in virtual reality are less used methods (Molfenter et al., 2018; Molfenter et al, 2015).

The most widely used method of SUD virtual intervention is computerized/web-based tests and therapies with no “live” interaction; they provide enhanced ease of access to evaluations. These treatments are called asynchronous (i.e., patients may access them at any time), with the benefit that they can be used by patients during crucial recovery periods. The other most widely used types of telemedicine are telephone-based treatment aids and counseling. They are classified as synchronous, involving real-time patient-clinician communication. Phone conversations provide help, link patients to services, and provide short treatments. The use of synchronous videoconferencing in medical care has grown as smartphones and tablets have become omnipresent over the past decade. In order to further expand SUD care choices, mobile applications and virtual reality are exciting emerging developments. The possibility of both asynchronous and synchronous scenarios is offered by virtual reality for SUD care (Oesterle et al., 2020).

Conclusion

COVID-19 is unlikely the last pandemic the world will face. All SUD patients face alienation, loneliness, losing their living standards, and fear of death and the life they are expected to live in an alien lifestyle during the pandemic. Many experts suggest that the pandemic may contribute to a global rise in drug use disorders as individuals deal with the anxieties and uncertainties caused by the pandemic. There are improvements in treatment processes, along with changing circumstances, and this is much more difficult for patients with SUDs.

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