

Substance use disorders during the COVID-19 pandemic: looking for new innovative approaches

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Abstract. Background and aim: The destructive impact of the still ongoing COVID-19 pandemic on those struggling with substance use disorders (SUD) stems from the daunting challenges which SUD patients experience in terms of coping with their condition and receiving care in a timely fashion. Methods: Patients struggling with addiction are at particularly high risk, due to the underlying vulnerabilities in their conditions and the stigmatization they often suffer. New Psychoactive Substances stand out as a critical area of concern. The authors have conducted a broad-ranging search to assess the impact of SUDs, along with their related mental, physical, and behavioral symptoms, against the backdrop of the COVID-19, taking into account how drug trafficking and consumption trends have evolved as the emergency draws out, and the cyberspace comes to play an ever-bigger role. Results: Given that roughly 1.5%-5% of the global burden of disease can be ascribed to alcohol abuse and substance addiction, the role of pandemic-related potential contributing factors in the exacerbation and relapse of SUDs and behavioral addiction cannot be discounted and needs targeted measures tailored to the special needs of SUD patients. Escalating environmental stressors stemming from abnormal circumstances can undermine recovery efforts and threaten the very survival of countless SUD patients, increasing the likelihood of relapsing for those in recovery. Conclusions: Policymakers and legislators have not yet put in place targeted measures and adjustments in the health care delivery mechanisms in order to countervail the pandemic impact on SUD sufferers, and the ever-evolving patterns of use and trafficking. (www.actabiomedica.it)

Key words: COVID-19 pandemic, Substance Use Disorder (SUD), New Psychoactive Substances (NPS), environmental stressors, social networking

Introduction

Those struggling with a substance use disorder (SUD) during the ongoing COVID-19 pandemic may experience considerable challenges in coping with their condition and receiving the care they need in a timely fashion. It is in fact hard to quantify and fully assess the sheer destructive impact of this pandemic on mental health, and that is all the more so concerning patients striving to cope with addiction. The huge impact of SUDs, with the array of mental, physical, and behavioral symptoms they cause, takes millions of lives every year, whether directly or indirectly, all over the

world. Roughly 1.5% of the global burden of disease can be ascribed to alcohol abuse and substance addiction, and that share can rise as high as 5% in some nations (1). Abnormally stressful circumstances, extraordinary anxiety levels, distancing and isolation, in addition to the physical toll taken by addiction are all potential contributing factors in the exacerbation and relapse of substance use issues and behavioral addiction. Housing insecurities, loss of employment, emotional distress are all highly significant environmental stressors, which along with isolation often lead to new substance use, or raise the likelihood of relapsing for those in recovery and addiction. The COVID-19

pandemic has exacerbated such a scenario by escalating environmental stressors and creating a high demand for substance use disorder treatment. Negative mindsets arising from higher than normal levels of irritability, anxiety, fear, sadness, anger or boredom are well-known contributing factors causing relapse, at times even long-time abstainers, while they can escalate drug consumption in current users. As for withdrawal symptoms arising during lockdown, they could cause individuals to go outside and roam the streets for drugs, thus jeopardizing both the implementation of such preventive measures and the well-being of SUD patients. Furthermore, with most healthcare resources focused on COVID-19, medical support for withdrawal symptoms has been scaled down (2). In that respect, there is no denying that pandemic-related limitations in access to healthcare services has been an issue of great concern in the implementation and provision of care for SUD patients.

Marginalization, stigma and flawed health care delivery systems

Even before the pandemic broke out, the United States National Institutes of Health denounced that people with addiction were likely to be neglected and marginalized in terms of health care provision. That is in large part because of the stigma which such individuals suffer, making them less likely to seek professional help (3). That is particularly worrisome in terms of access to medication-assisted treatment. Service provision is a major challenge, not only due to the increasing need for services needed to cope with the mental health burden of COVID-19, but also because of the restrictions in place in clinical areas to achieve social distancing. Moreover, as the pandemic unfolded in all its destructive power, SUD patients had to deal with major concerns and hurdles, such as the safety of accessing methadone clinics for the treatment of opioid addiction. Hence, not only are marginalized social segments such as SUD sufferers particularly vulnerable to SARS-CoV-2 infection, they are also highly susceptible and exposed to a much harsher psychosocial burden.

Social stigma is a major factor in causing the alienation of SUD patients from medical care and

recovery support, and that certainly pre-dates the pandemic. Evidence from the literature prior to the COVID-19 pandemic points out that stigma toward opioid users often poses a major hurdle to access to treatment (4). Although a consensus has long been reached that addiction constitutes a complex brain disorder with behavioral components, the general public, and regrettably even many healthcare professional and in the justice system still deem it a result of character flaws and contemptible moral weakness (5). Prior to the pandemic outbreak, only 10 percent of individuals suffering from SUDs received treatment in the United States, which contributed to the 70,000 drug overdose-related deaths each year, of which over 75% are caused by opioid abuse. The three classes of drugs responsible for the vast majority of overdose deaths in the USA have also played a prominent role in Europe: the most commonly used illicit opioid in Europe remains heroin, responsible for most deaths from overdoses (6–8). It is safe to say that the opioid crisis has been substantially worsened by the pandemic, which has also highlighted and precipitated the weaknesses of healthcare systems, in which all too often individual and structural stigma against patients and medications for treatment makes it hard for such patients to receive care (9).

New Psychoactive Substances against a highly unstable backdrop

To make matters worse, COVID-19-related disruptions in the mobility of both people and goods has affected drug markets and made them more volatile. That instability is particularly alarming, particularly as far as new psychoactive substances (NPSs) are involved, since it could entail a higher risk of substitution, misselling, adulteration, contamination and dilution with various potentially hazardous and often seriously harmful substances, which could in turn lead to mass poisonings, with the risk of further straining healthcare facilities in pandemic times (10–14). Drug shortages brought about by the pandemic could lead to the introduction of new, unknown, substances peddled through unconventional unlawful avenues: the very considerable growth of the dark net, has paved the way for new means of illicit drug trafficking and marketing. The

COVID-19 pandemic has in turn created an ecosystem conducive to growth and a further shift towards online commerce and communication, which may foster an evolution in global criminal activities through the impervious environment of the dark net. The United Nations itself has recently sounded the alarm in that regard (15), stressing that although illicit drug trafficking on the dark web is a relatively new phenomenon, starting to make headlines about decade ago, its market reach and scope are now reportedly worth at least US\$ 315 million every year, a 400% growth over the 2011–2020 decade. Furthermore, the dangers which such technological innovations entail stem largely from the adaptability of both traffickers and users in terms of availing themselves of such new, and extremely hard to control, platforms to sell drugs and other illegal products and services. Social networking has gradually extended its reach as the COVID-19 pandemic unfolds. Such an evolution will likely result in a “flatter”, more globalized and almost boundless market where illegal substances will become available and accessible virtually anywhere, and new NPS are developed that can elude detection and oversight mechanisms (16–18). Patterns of drug use, as well as, public health implications could be profoundly affected by such dynamics. Moreover, the highly relevant role played by digital internet-based communication cannot be discounted: a recent observational qualitative analysis spanning the September–October 2020 (19) has highlighted the role of novel communication tools and social networks in terms of how such extremely far-reaching avenues have been harnessed by drug users and dealers. There is no denying that in recent years, social media have grown exponentially in terms of popularity and user pools. Drug users and dealers have increasingly moved into the cyberspace and availed themselves of such platforms to interact and share information freely about the various types of substances being developed and marketed, their prices, levels of purity, effects, ways of administration and dosages, with a particularly close focus on newly synthesized and marketed substances. Quite significantly, the study has remarked how the supervision of social media platforms could prove an effective tool for the identification of still unknown NPSs during the COVID-19 pandemic. Moreover, such new analytical avenues may go a long way towards enabling us

to understand the complex psychological, cultural, and behavioral distinctive traits and patterns that unfold in the drug dealing/consumption universe. Such an understanding could be valuable in terms of outlining and implementing new approaches and strategies for drug enforcement, prevention and therapeutics, which must be custom-designed to meet the needs that arise from ever-changing and hardly predictable settings such as the COVID-19 pandemic. Hence, in light of the ever-growing degree of complexity of illicit drug markets (particularly NPSs, which can notoriously fly under the radar of drug enforcement and detection networks) and the multifaceted broader picture of international drug trafficking, detection and response capabilities must be strengthened and renewed in order to meet unique challenges in a unique setting (20–22). That has to be done largely by fine-tuning and improving the fundamental means by which to evaluate and face existing and new threats in a timely fashion, in order to stave off or at least contain the damage to public health and our social fabric done by new psychoactive substances (23) at a time when the eyes of nations, legislators and health care providers are all but engrossed by the still ongoing pandemic. Detection and response strategies needs to be aimed both at specific, immediate threat and at the provision of longer-term input into articulated and comprehensive drug policy (24–26).

Conclusions

Severe short- and long-term physical, psychological and socioeconomic consequences stemming from drug abuse and SUDs during the COVID-19 pandemic are bound to result in severe strain on drug addiction health care services when the pandemic finally relents and the system goes back to normal (27). Although currently available findings as to the impact of COVID-19 on drug challenges are still inconclusive, the sources herein analyzed seem to point out that the economic disruptions and rising poverty levels caused by the pandemic are likely to make illicit drug cultivation and production more appealing to fragile rural communities. At the same time, the socially destructive impact of the pandemic, which disproportionately affects already vulnerable social segments and

populations, has a potential to push more people into drug use and addiction, thus further exacerbating the broader socioeconomic picture. Overall, SUD, addiction and COVID-19 can form a dangerous combination and feed each other: in fact, on the one hand, drug use can raise the risks linked to COVID-19; abusing opioids such as hydrocodone, codeine, oxycodone, fentanyl, and heroin can quickly deteriorate the lungs and respiratory health, while smoking any drug, tobacco, or marijuana (28–30) puts smokers at higher risk for being hit hard by COVID-19, (31, 32), although some studies have been investigating the possible therapeutic potential of cannabis for COVID-19 patients (33–35); on the other hand, the social and psychological aftermath of the pandemic itself can result in higher rates of drug abuse, and a vicious cycle of catastrophic potential may be developing. Such damages may well escalate and spiral out of control, if the special needs of traditionally marginalized classes are not addressed with targeted, clearly-defined and easily accessible measures. A dependable and robust support system needs to rely on all stakeholders playing a role in its implementation: government bodies, society at large, families and health care professionals. Supporting the social security and health care rights of SUD patients depends in large part on keeping prescription drugs and de-addiction/harm-reduction services available and accessible. Just as importantly, a higher degree of awareness and understanding must be achieved as to the use trends and patterns of NPS during the Covid-19 pandemic, and their highly harmful impact on human behavioral dynamics and mental conditions. Hence, given how current research has so far been valuable but inconclusive, broad-ranging longitudinal studies need to be conducted, in order to widen our knowledge of human behavioral and adaptive responses under extremely harsh and extraordinary conditions such as those brought about by the ongoing pandemic.

Conflicts of interest: Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article.

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