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The COVID-19 Pandemic and its Impact on Substance Use: Implications for Prevention and Treatment

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Abstract

The COVID-19 pandemic has brought major challenges to healthcare systems and public health policies globally, as it requires novel treatment and prevention strategies to adapt for the impact of the pandemic. Individuals with substance user disorders (SUD) are at risk population for contamination due to multiple factors – attributable to their clinical, psychological and psychosocial conditions. Moreover, social and economic changes caused by the pandemic, along with the traditional difficulties regarding treatment access and adherence – will certainly

worsen during this period, therefore aggravate their condition. In addition, this population are potential vectors of transmission. In that sense, specific strategies for prevention and treatment must be discussed. health care professionals dealing with SUD must be aware of the risks and challenges they will meet during and after the COVID-19 outbreak. Addiction care must be reinforced, instead of postponed, in order to avoid complications of both SUD and COVID-19 and to prevent the transmission of coronavirus.

The COVID-19 pandemic has brought major challenges to healthcare systems and public health policies globally, as it requires novel treatment and prevention strategies to adapt for the impact of the pandemic (Stratton, 2020). Individuals with substance user disorders (SUD) are at risk population for contamination due to multiple factors – attributable to their clinical, psychological and psychosocial conditions (Lagisetty et al., 2017; Peacock et al., 2018). Moreover, social and economic changes caused by the pandemic, along with the traditional difficulties regarding treatment access and adherence – will certainly worsen during this period, therefore aggravate their condition. In that sense, specific strategies for prevention and treatment must be discussed (Bojdani et al., 2020; Lagisetty et al., 2017).

It is known that the state and the severity of SUD are associated with - and can impact on clinical and psychological conditions (Lagisetty et al., 2017; Schulte and Hser, 2014). Therefore, in order to measure the impact of COVID-19 on drug users and to suggest specific strategies, it is important to consider peculiarities of these subgroups, such as: a) persons with mild SUD versus moderate to severe SUD; b) those currently in abstinence versus active substance use; c) those with comorbid psychiatric disorders (including consumption of multiple substances).

Severity of COVID-19 has been associated with some clinical and demographic characteristics, such as chronic respiratory diseases, diabetes, hypertension and immunosuppression – which knowingly increase the lethality risk for COVID-19 (Cascella et al., 2020). In this sense, subjects with moderate to severe SUD – who are already an important risk group, could suffer major impacts, since they have been previously associated with all these conditions (Lagisetty et al., 2017). Furthermore, previous studies have reported that tobacco and alcohol consumption can facilitate and

aggravate the flu (Godoy et al., 2018; Meyerholz et al., 2008; Sureshchandra et al., 2019). The fact that drug users frequently abuse these substances in combination with other drugs can cause additional risk. Elderly patients are also in the main risk group, and it is important to note that the prevalence of SUD in this population is higher than ever in the world, including both licit and illicit drugs (Kuerbis et al., 2014). Therefore, substance use could increase the risk to this already vulnerable age group when associated with these clinical comorbidities.

In addition to the aforementioned facts, coronavirus could make addicts more vulnerable to complications of substance use. Chronic respiratory diseases have already been associated with increased overdose mortality due to opioids, a substance that can depress breathing (Hulin et al., 2019). Therefore, could even mild symptoms of COVID-19 threat this population? Similar questions can be addressed for patients with chronic use of cigars, crack-cocaine (Dolapsakis and Katsandri, 2019), and perhaps even vaporizers, that are kwon to cause pulmonary complications and diseases (Chand et al., 2019; Cherian et al., 2020). Although no studies have been conducted yet about the implications of COVID-19 in respiratory complications of drug users, it is probable that the infection will severely be manifested in subjects with SUD involving these specific means of drug use.

While drug use can increase the risks associated with a coronavirus infection, the social and psychological risks of the pandemic can favor and intensify drug abuse, in a potentially catastrophic cycle. Social distance, isolation or quarantine are essential measures to help prevent coronavirus transmission - however, these strategies, and the pandemic outbreak itself, have been associated with negative emotions, such as irritability, anxiety, fear, sadness, anger or boredom (Ornell et al., 2020). These conditions are known to trigger relapse, even in those long-term abstainers, or intensify drug consumption (Serafini et al., 2016; Sinha et al., 2009). Withdrawal symptoms elicited during lockdown could also jeopardize these preventive strategies, as it could drive individuals to go outside for drugs. In addition, medical assistance for these symptoms will be limited, since the major medical efforts are geared towards the COVID-19 pandemic. Even in the case of hospitalization, it may be difficult to maintain voluntary stay, generating more stress to healthcare workers, already overburdened because of the pandemic. Homelessness can also compromise preventive strategies, as individuals tend to wander during the day and sleep in crowded places during the night, making them

potential vectors of transmission. Social distancing is also challenged during incarceration, permanence in therapeutic communities or other addiction treatment facilities, many of which philanthropic institutions without complying to health security standards. These are conditions highly prevalent among substance users, and may require specific strategies that encompass the individual's needs for prevention of COVID-19, SUD treatment and the protection of healthcare workers (Volkow, 2020). In all these scenarios, drug seeking behaviors could increase exposure to infection for addicts, their families and healthcare professionals.

With regard to world economy – assuming a gigantic financial crisis - would this exacerbate SUD prevalence? Past crises have particularly impacted on more vulnerable populations, increasing substance use (de Goeij et al., 2015; Dom et al., 2016). It is therefore expected that vulnerable and at-risk individuals will develop SUD – as well as subjects with mild SUD could progress to more severe forms of the disorder.

With regard to treatment, the need for personal protective equipment (PPE) by health care professionals may limit some strategies, such as street level harm reduction, especially as PPEs become less available. These strategies could be crucial to help curtail and/or adequately treat COVID-19 in this population. On the other hand, professionals dealing with COVID-19 may need special training to deal with substance users, assuming that treatment demand among these patients may increase (Volkow, 2020).

In conclusion, health care professionals dealing with SUD must be aware of the risks and challenges they will meet during and after the COVID-19 outbreak. Addiction care must be reinforced, instead of postponed, in order to avoid complications of both SUD and COVID-19 and to prevent the transmission of coronavirus. Professionals dealing with COVID-19, on the other hand, should consider complications of SUD during treatment. For substance use, strategies must take into consideration clinical, demographic and socioeconomic factors. Telemedicine should be considered for mild cases of SUD and PPEs must be available for those working in the street level. Addiction treatment facilities must adhere to preventive measures, such as quarantine for recently admitted patients and minimal distance between beds, and, for this purpose, special guidance by public health officials should be available. These efforts could help not only individuals with SUD, but also in the control of the pandemic and so, the society as a whole.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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