

# COVID-19 in Individuals with Drug Abuse - A Case and Thoughts from Emergency Physician

Sir,

Coronavirus disease 2019 (COVID-19) patients present with a range of comorbidities including drug abuse. A 45-year gentleman with known history of drug abuse, including heroin and cocaine, presented with fever, lethargy and mild shortness of breath for three days. He also had hypertension and diabetes. On physical examination, his vitals were: heart rate 140 beats/min, blood pressure 102/60 mmHg, oxygen saturation 89% on room air, and respiratory rate 30 breaths/minute. His body temperature was 38°C. Chest examination, including pulmonary and cardiovascular systems, were unremarkable. Laboratory investigations showed lymphopenia ( $0.6 \times 10^9/L$ ). C-reactive protein was 4.7 mg/L. The COVID-19 gene-xpert test was positive in the Emergency Department. The patient's symptoms gradually improved during hospital stay with conservative management, including intravenous hydration with normal saline. He returned home after three days of hospitalisation.

COVID-19 pandemic by the novel single stranded RNA genome SARS-CoV-2 virus has overwhelmed the global healthcare systems. It is a reason of concern for individuals with substance use disorders (SUDs). There is a minimal data to support this notion but literature is coming out to support that individuals with SUDs are at greater risk of contracting COVID-19 infection.<sup>1-3</sup> Risk of COVID-19 is greater with the diagnosis of alcohol use disorder (AUD), followed by tobacco use disorder.<sup>1,2</sup> Individuals with opioid use disorder (OUD) are also more likely to acquire COVID-19 infection.<sup>2,3</sup> With the lifetime diagnosis of SUDs, they are considered more likely to experience severe outcomes including hospitalisations and mortality.<sup>1-3</sup>

The reasons behind this hypothesis are fairly complex. Firstly, they are considered as more vulnerable to infections as described in literature that opioids hamper respiration leading to hypoxia.<sup>1,2</sup> Secondly, behaviours linked to illicit drug use increase the risk of acquiring infections.<sup>1-3</sup> Individuals with SUDs interact with other drug users to obtain drugs. Damage to respiratory system is well known and link of smoking to vaping is already established, where individuals with traditional cigarettes and vaping are seven time more likely to report having COVID-19.<sup>1-3</sup>

Stigma and discrimination in healthcare access for individuals with SUDs are a challenge with reluctance to seek medical attention with fear of substandard treatment or rejection for care.<sup>1-3</sup>

Such barriers make them vulnerable and at higher risk of adverse outcomes of COVID-19 infection. Such individuals usually also have comorbidities including hypertension, cardiovascular diseases, diabetes and renal failure.<sup>3,4</sup>

It is important for emergency physicians to screen such patients and monitor them closely to avoid adverse outcome of COVID-19 infections. As the vaccine is becoming available, its distribution highlights the healthcare disparities driven by social and economic factors that place these individuals more at risk for COVID-19 adverse outcomes and reporting of prevalence.<sup>3,4</sup> There is a need for urgent action to counteract these risks.

## PATIENT'S CONSENT:

Verbal consent was obtained from the patient to publish the data concerning this case.

## CONFLICT OF INTEREST:

The author declared no conflict of interest.

## AUTHOR'S CONTRIBUTION:

SS: Solely drafted and edited the manuscript.

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Received: January 11, 2021; Revised: February 19, 2021;

Accepted: April 23, 2021

DOI: <https://doi.org/10.29271/jcpsp.2021.JCPSPCR.CR142>

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