

# COVID-19-shaped substance abuse and adulteration dynamics: Lasting beyond the pandemic?

*Lina De Paola, Gabriele Napoletano, Raffaella Rinaldi*

Department of Anatomical, Histological, Forensic and Orthopedic Sciences, Sapienza University of Rome, Rome, Italy

## To the Editor,

Substance abuse trends and underlying dynamics have been profoundly affected by the COVID-19 pandemic, as have consumption, addiction and trafficking patterns.

The adulteration of known substance of abuse by other foreign substances is a well-known issue that poses a major threat to public health and the social fabric of our society, due to the indirect costs and damages of addiction which go well beyond those directly affected.

During the pandemic, there was a significant shortage of “traditional” substances of abuse, along with the restrictions preventing users and addicts to look for such drugs. Such developments have led to the misuse psychoactive prescription drugs such as benzodiazepines and others drugs designed for other purposes (1). The danger to be accounted for in that respect is that the pandemic impact may have led to structural alterations, potentially capable of lasting even beyond the pandemic itself, in substance use patterns; that may lead to higher risk of replacement, adulteration, contamination, and dilution with potentially harmful or even lethal substances. In that regard, it is worth stressing the importance of coordination and synergistic efforts shared by forensic science and toxicology laboratories, aimed at the timely detection and response to such consolidating trends (2,3). Also significant is the fact that during the pandemic emergency, users looked much less for drugs traditionally associated with “socializing” to be taken in recreational settings; rather, psychotropic drugs usually consumed

in solitude were more often sought. The fundamental context is noteworthy here: even relatively short spells of solitude and isolation can in fact adversely affect physical and psychological well-being. Isolation and loneliness can give rise to or exacerbate negativity, anxiety and anger, and disrupt sleeping patterns, adding to depression and post-traumatic stress disorder; given the unprecedented background circumstances, all such highly impactful developments may have gone undiagnosed, untreated or underestimated, because of the unavailability of specific screening tools. Furthermore, psychological counseling and psychiatric assistance was severely limited during the pandemic as well, due to the temporary closure or reallocation of resources and facilities for COVID-19 patients (4-6). Severely reduced access to legal substitution treatments for addicts has harmed the prospects for recovery of such patients, which is why addiction treatment services have highlighted the importance for easier access to methadone and buprenorphine, which can allay withdrawal symptoms, cravings, and potentially stave off opioid overdose. In fact, social distancing has heightened the risk of isolated overdose, and subsequent failure to administer potentially life-saving naloxone by health services, which can lead to more overdose fatalities. In addition to substance abuse through prescription sedatives available at home, some users may have shifted to narcotics such as new synthetic opioids or designer benzodiazepines (i.e. the two classes of new psychoactive substances which registered the highest consumption growth in 2019), available online. Such novel psychoactive substances have the potential to elude traditional screening techniques and it takes

time before they are discovered on illicit markets (5,6). They can also serve as adulterants of conventional substances, making it particularly challenging to provide treatment. Current data and research findings are still quite inconclusive for the purpose of determining the extent to which the novel trends of drug abuse and adulteration trends are lasting beyond the COVID-19 pandemic (6). Yet on such a determination may largely depend the success of our effort to stem drug abuse and provide life-saving care to those in need. Hence, it is of utmost importance for the research community, law-enforcement and policy-makers to make concerted efforts to properly identify and evaluate the evolution of substance abuse and adulteration trends. Longitudinal studies based on data exchange at the national and international level will enable us to identify the changes and evolution of substance abuse and thus establish the best approaches and devise the most effective measures to meet the challenges posed by changed drug abuse dynamics, as well as by new consumption and trafficking trends. On such an awareness is based the essential struggle to tackle drug abuse and addiction, for the sake of patients, their families, society and public health as a whole. From such a perspective, the COVID-19 pandemic can offer us a valuable chance to reconfigure and revamp addiction treatment frameworks and networks, and enable the research community to effectively deal with the drug addiction challenges of the post-pandemic era. Such a multi-layered effort needs to rely on fundamental pillars such as easier and more timely access to care, even through novel innovations such as telemedicine; a more multidisciplinary scope for care provision, with addiction specialists providing support to non-specialists; and lastly, tackling stigmatization and scapegoating which often penalize the recovery efforts by patients with drug use disorders.

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## Correspondence:

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Gabriele Napolitano, MD

Department of Anatomical, Histological, Forensic and Orthopedic Sciences, Sapienza University of Rome, 00161 Rome, Italy

E-mail: gabriele.napolitano@uniroma1.it

ORCID ID: 0000-0002-5248-6896