

New psychoactive substances and low-income countries: a burgeoning (and neglected) crisis

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Abstract

New psychoactive substances (NPS) are compounds intended to replicate the effects of legal and illegal drugs. The continuous detection of new NPS via several forensic toxicology techniques attests to the considerable NPS popularity all over the world, although such determinations rely on still indecisive findings, given the elusiveness inherent in NPS and the lack of standardized and uniformly applied detection and screening techniques. A worrisome and neglected issue is the proliferation of NPS and other drugs of abuse in developing countries. Demographics may partly explain such an emerging threat, which in a globalized world is likely to have an impact that goes well beyond national borders, especially in light of the criminal organizations' ability to function and operate in the cyberspace, harnessing the potential of the "dark web" to overstep the boundaries and oversight mechanisms put in place by nations and international institutions. *Clin Ter 2022; 173 (3):224-225 doi: 10.7417/CT.2022.2423*

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Dear Editor,

New psychoactive substances (NPS) are compounds intended to replicate the effects of legal and illegal drugs, either in a pure form or as a preparation. They are not controlled under the 1961 Single Convention on Narcotic Drugs or the 1971 Convention, but can gravely threaten public health. Substances categorized as NPS include, but are not limited to, tryptamine derivatives, synthetic opioids, phencyclidine-like dissociatives, GABA-A/Beta receptor agonists, piperazines, psychotropic plants/herbs, and image and performance-enhancing substances. Other examples of NPS include synthetic cathinone (1) and cannabinoids (2), novel hallucinogens, and benzodiazepines. Varying amounts of new NPS are constantly detected through various forensic toxicology techniques by national health authorities and drug enforcement (3, 4), and their use as adulterants has

also been detected and analyzed (5). When it comes to the of NPS popularity on the global stage, it is not easy to come by conclusive data, given the elusiveness inherent in NPS and the difficulties stemming from the lack of standardized and uniformly applied detection and screening techniques (6). A recent study (7) encompassing 28 NPS stimulants in wastewater samples from 25 sites in 10 countries over the 2020–2021 new year period, using validated liquid chromatography–mass spectrometry found eutylone and 3-methylmethcathinone (3-MMC) most frequently detected and with the highest recorded mass loads. Older generation substances such as para-methoxyamphetamine (PMA), methylone, and mephedrone, were also detected. Still, it is worth noting that the study only focused on high-income countries, whereas NPS have been denounced by the United Nations Office on Drugs and Crime (UNODC) World Drug Report 2021 as an issue of increasing relevance and severity in low-income countries: a 500% rise has been observed in South and Central America in NPS seizures by drug enforcement agencies (8). In Africa, the NPS crisis has been categorized to be on the rise as well, with the scale of seizures growing from "minor" to "substantial". Most of NPS detected in the continent are natural or plant-based NPS, which are often the origin of synthetic NPS and therefore deserve further scrutiny. Higher incidences were also seen in the 2015–2019 period in the Near and Middle East, South and Southwest Asia. We believe that it would be a mistake to discount the importance and the likely impact of the pandemic on such trends. UN reports point to over 100 million people who have been thrown into extreme poverty, in addition to booming joblessness and ever-widening social gaps, inequalities and ever-more unequal distribution of wealth. Global job losses in 2020 alone totaled 114 million. In light of such alarming economic decline, it is safe to assume that more people have been made vulnerable and susceptible to drug use and more inclined to undertake illicit crop cultivation. Moreover, demographics does not bode well for developing countries either: drug use is linked to population age and birth rates. Africa has been projected to have the most remarkable population growth of any other

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continent in the 2018–2030 time span. That makes it likely to experience a high growth in the number of drug users in the next decade, as the population increases overall. Even assuming that the prevalence of drug use will not change overall, which may or may not, population growth alone in Africa would cause a 38% growth in the number of drug users in the 2018–2030 period, thus possibly reaching 83 million users, with a range set by UNODC at 49–112 million by 2030 (8). It would be a serious mistake to believe that proliferation of illicit drugs in developing countries would pose no threat to our own. Intercontinental trafficking in a globalized setting has proven extremely resilient, hard to track and uniquely resourceful. Data are unequivocal as to how fast drug trafficking organizations have managed to recover from the setbacks brought about by the pandemic and restrictions thereof. Drug trafficking organizations have already reached pre-pandemic levels, and appear to be expanding. Accessing illicit drug-trafficking avenues has become easier through internet transactions, and substantially large drug markets on the “dark web” are estimated to be worth \$315 million annually (8). The pandemic has gradually created an ecosystem where contactless drug transactions, such as through the mail, have been thriving (9). The risk that low-income countries may increasingly become incubators and factories of new, elusive and almost undetectable illicit substances poses a threat that so far has not been adequately addressed by governments or supranational institutions (10).

Conflict of interest: The author declares that he has no conflict of interest regarding this manuscript.

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