

EDITORIAL

New psychoactive substances as drugs of abuse: the situation in Spain

Nuevas sustancias psicoactivas como drogas de abuso: situación en España

Miguel Galicia

The widespread use of substances of abuse is a reality in Europe. An estimated 28.9% of adults aged 15-64 years living in the European Union (around 83 million people) have used illegal drugs at some point in their lives, and some 17.4 million young adults (15-34 years) have done so over the past year. The classic drugs (cocaine, cannabis, opiates, and amphetamines) remain the most prevalent, but since 2015, the annual emergence of some 400 "New Psychoactive Substances" (NPS) has been observed, adding to the menu of substances of abuse available to users.¹ The acronym NPS refers to "substances of abuse, whether in pure form or in preparation, which are not controlled by the 1961 Single Convention on Narcotic Drugs or the 1971 Convention on Psychotropic Substances, but which may pose a threat to public health".² New does not mean that they were recently invented - some were synthesized in the 1970s - but rather substances that are newly available on the market. This wide variety of psychoactive substances does not remain entirely available to users, as the market is very fluid and new drugs enter and leave it (in 2019 there were 541 different NPS on the market, of which 71 had been identified for the first time that year, while another 230 NPS had not been detected since 2016).³ Regarding the consumption of NPS in Spain, 1.7% of the population aged 15-64 years report having consumed these new substances at some time in their lives, with the group of men aged 25-34 years reporting the highest consumption rates (4.0%).⁴ But the fact that the percentage of the population using them is low does not imply that NPS are not circulating in Spain; the Spanish Early Warning System (Spanish acronym, SEAT) has detected 5, 12 and 4 previously unknown NPS in the last 3 years (2018, 2019 and 2020, respectively), 3 of them detected for the first time also in Europe (EPT -Nethyl-N-propyltryptamine-, amantadine -adamantan-1-amine-, and promethazine-N, N-dimethyl-1- (10H-phenothiazin-10-yl) propan-2-amine-).⁵

NPS are not easily identifiable in emergency laboratories. Toxicological screening tests commonly used in hospital emergency departments (ED) are based on immunoassay techniques and only detect the presence of certain substances (usually cocaine, cannabis, amphetamines, benzodiazepines, and opiates) above a certain concentration.⁶ For the identification of other intoxicants, including NPS, more complex diagnostic tests and techniques (such as gas chromatography coupled to mass spectrometry)⁷ are required, which are not available in most EDs. Therefore, other circumstances suspicious of NPS use should be considered, such as the presence of symptoms of cannabis intoxication in patients with a negative test,⁸ its association with certain sexual practices such as chemsex, or in cases of victims of chemical submission.⁹ In any case, NPS use should be suspected in any patient who is a poly-consumer of other substances of abuse and whose clinical course is abnormal.¹⁰

The present issue of EMERGENCIAS publishes two very interesting papers related to NPS and chronic drug abuse. In the first, Gomila et al. analyze the unsuspected detection of NPS in methamphetamine and amphetamine users attended in the ED.¹¹ Their work demonstrates the association between the recreational use of amphetamine derivatives and the consumption of synthetic cathinones (mephedrone and methylone), confirming analytically their presence in 28% of patients, and being much more common in methamphetamine users than in amphetamine users (90.9% vs. 9.1%). It also warns about the poly-drug user profile of NPS users (in most cases 3 or more substances are detected) and that their use is unsuspected or not declared in the clinical interview. In summary, this article proposes to contemplate the routine detection of NPS in EDs attending patients intoxicated by methamphetamine, either by implementing the necessary technology in the centers, or by referring the analytical samples to reference centers. In the second article, Supervía et al.¹² present an excellent review of the pathology associated with chronic consumption of crys-

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tallized methamphetamine (shabu), analyzing the cases attended for 8 years in a tertiary level hospital. The heterogeneity of the clinical presentation (cardiovascular, psychiatric, neurological pathology) and the presence among the cases analyzed of pregnant women, with severe cases of intrauterine fetal diseases, are striking. In any case, this work reminds us that substance abuse also causes long-term chronic pathology.

Emergency medicine professionals must constantly update their knowledge in any area of health care, but especially in the management of acute poisoning. In fact, acute poisonings are a pathology almost exclusive to the ED: they account for 0.1-3.5% of the attendances, 60% of which are secondary to the use of drugs of abuse.¹³ And the vast majority of patients are treated exclusively in EDs, as they are discharged home in 75% to 89% of cases after the ED visit.^{7,14} It is almost certain that the place where the next first overdose caused by the latest drug on the market will be treated will be an emergency department: perhaps an ED in a large city, or perhaps the ambulance that assists the local festivities with no hospital nearby. And it will also be an ED professional who detects atypical presentations of drug use.¹⁵

The chronic neglect of responsibilities that the Spanish Government (whatever its political color) has been leading for decades has prevented the creation of the Specialty of Emergency Medicine (and, in relation to the subject that concerns us, also the Specialty of Clinical Toxicology) and has therefore made it impossible for those of us dedicated to Emergency Medicine to acquire the homogeneous knowledge and skills that would allow us to offer care of similar efficiency and quality throughout Spain.¹⁶ For all these reasons, we have to update our knowledge and skills on our own. Regarding the care of drug intoxicated patients, and given the constant emergence of new drugs, the participation of EDs in Spanish and European multicenter sentinel networks^{17,18} favors the acquisition of information on new substances, consumption trends, and pathologies related to their use. And it also allows us to improve the management of our patients. Because it has been shown that professionals who are familiar with the latest substances treat patients with greater confidence than those who are not, even if the treatment is not specific.¹⁹

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