mass spectrometry (PS-MS) confirmation. Finally, this newly developed method will be used in seized drug samples.
Results: The soaking time of the filter paper is affecting the enhancement. As the papers stay in the nanostar solutions more (up to 6 days), the enhancement of the peaks gets better. Different illicit drugs such as fentanyl, fentanyl analogs, cocaine, heroin, and methamphetamine can be detected on these filter papers by portable Raman spectroscopy. Optimizing the PSI-MS method is still in process.
Conclusions: Coupling portable SERS and PSI-MS methods will provide strong confirmatory results for real-world samples and drug mixtures. The experimental results obtained in this project can be readily implemented in field applications and in smaller laboratories, where inexpensive portable Raman spectrometers are often present and are used in drug analysis.

doi: 10.1016/j.etdah.2023.100088

Novel Drugs of Abuse: What Clinicians Need to Know?

A. El Mougy

Erada Center for Treatment and Rehabilitation, UAE; E-mail address: a.elmougy@erada.ae

Drug abuse is a growing concern all over the world, and over the past decade, novel drugs have emerged and have become increasingly popular. Designer drugs—otherwise known as synthetic drugs—are manufactured to chemically resemble illicit drugs but may be purchased legally because drug manufacturers constantly change the chemical structure to circumvent drug laws. “In fact, designer synthetic drugs are found to be more potent and dangerous than their street drug counterparts” (NIDA, 2015). People who abuse designer synthetic drugs have suffered a number of negative health outcomes that include anxiety, seizures, hallucinations, loss of consciousness, and significant organ damage (DEA, 2013). Recognition and treatment of new drugs of abuse pose many challenges for health care providers due to lack of quantitative reporting and the difficulty of detection in routine blood and urine analyses (Rech et al., 2015). Clinicians should familiarize themselves with management principles of these new agents. Therefore, the purpose of this workshop is to describe the pharmacology, clinical and adverse effects of several new classes of drugs of abuse as well as management of patients with addiction to these drugs.

doi: 10.1016/j.etdah.2023.100089

Future of Legalization of Cannabis and its Impact on the Availability of Synthetic Cannabinoids

A. El Mougy

Erada Center for Treatment and Rehabilitation, UAE; E-mail address: a.elmougy@erada.ae

In recent years, there has been a strong pressure on legislatures to legalize or decriminalize use and possession of specified amounts of cannabis in many Countries. Opinions about drug legalization/decriminalization can differ based on whether a person has a personal history of substance use and as a function of demographic and ideological characteristics (such a religious or political preference). Legalization of drugs (e.g., cannabinoids) is the process of removing all legal prohibitions against it. Decriminalization of drugs (e.g., cannabinoids) means it would remain illegal, but the legal system would not prosecute a person for possession under a specified amount. Instead, the penalties would range from no penalties at all, civil fines, drug education, or drug treatment. Proponents of drug legalization argue that prohibition in general and the “War on Drugs” that began in the 1980′s, in particular, have created a black market for drugs, overloaded the criminal justice system, and failed to reduce the supply of drugs. On the other hand, the negative data of cannabinoids use far outweigh a few documented benefits for a limited set of medical indications, for which safe and effective alternative treatments are readily available. If there is any medical role for cannabinoid drugs, it lies with chemically defined compounds, not with unprocessed cannabis plant. On the other hand, the easy availability, cheapness, perceptive legality, and difficulty in detecting its presence with standard urine toxicologic tests, and similar factors probably contribute to the increased use, and popularity of synthetic cannabinoids. Although laws, and regulations concerning auditing of these substances have been implemented in many countries, production of new types of synthetic cannabinoids rapidly takes place.

The Dynamic Nature of Novel Psychoactive Substances: A Comprehensive Analysis of the Impact of 10 Years of the NPS Conference Series

G. Esposito
University of Trento, Italy; E-mail address: gianluca.esposito@unitn.it

Not available.

doi: 10.1016/j.etdah.2023.100090

Towards Strengthened Preparedness and Response to New Psychoactive Substances in Europe

A. Gallegos

European Monitoring Centre for Drugs and Drug Addiction (EMCDDA); E-mail address: Ana.Gallegos@emcdda.europa.eu

In January 2022, the European Commission proposed to strengthen the mandate of the EMCDDA, transforming it into the new EU Drugs Agency (EUDA) [1]. This new regulation aims to improve data sharing, preparedness, surveillance, risk assessment, early warning, prevention, and response [2]. Under the new regulation, the European Union Early Warning System (EWS) on New Psychoactive Substances (NPS) will continue to have a central role in supporting national- and EU-level preparedness and responses to NPS. The EWS, operational in Europe since 1997, was the first regional early warning system to be established to monitor new psychoactive substances (NPS) and has been recognized as a model for national, regional and international early warning systems [3]. The EU EWS rapidly detects, assesses, and responds to health and social threats caused by NPS. Data collected and analyzed include event-based data on seizures by law enforcement, collected samples and serious adverse events linked to NPS. These data are complemented by annual reports, which include aggregated data on seizures and from poisonings. This presentation will provide an update from the EWS on NPS, highlight emerging threats in Europe, and reflect on the role of early warning systems in monitoring, strengthening preparedness and responding to NPS. [1] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022PC0018; [2] https://www.consilium.europa.eu/en/press/press-releases/2023/03/28/eu-drugs-agency-council-presidency-and-european-parliament-agree-to-strengthen-the-agency-s-role/; [3] https://www.emcdda.europa.eu/publications/rapid-communication/update-eu-early-warning-system-2022_en.

doi: 10.1016/j.etdah.2023.100091