

Kosmicare Drug Checking Service: Trends and Analytical Results

Barra, Bárbara^{a,b*}; Cunha, Mar^c; Martins, Daniel^c; Neng, Nuno^{a,b}; Quintas, Alexandra^a; Gaspar, Helena^d

^a Laboratório de Ciências Forenses e Psicológicas Egas Moniz, Egas Moniz Center for Interdisciplinary Research, Egas Moniz School of Health & Science, Quinta da Granja, 2829-511 Caparica, Portugal.

^b Centro de Química Estrutural, Institute of Molecular Sciences, Departamento de Química e Bioquímica, Faculdade de Ciências, Universidade de Lisboa, Campo Grande, 1749-016 Lisboa, Portugal.

^c Kosmicare, Rua Cesário Verde 17, 1170-090 Lisboa, Portugal.

^d BioISI-Biosystems & Integrative Sciences Institute, Departamento de Química e Bioquímica, Faculdade de Ciências, Universidade de Lisboa, Campo Grande, 1749-016 Lisboa, Portugal.

* E-mail: 118316@alunos.egasmoniz.edu.pt

Introduction

Recreational drug markets offer a wide range of illicit substances^[1]. Individuals who purchase these substances are typically aware of the associated risks and therefore seek information on harm reduction and strategies to minimize potential problems. One major risk is the high variability in the composition of the products sold. To address this, some users opt **to test their samples** to ensure they know what they are consuming^[2].

Most commonly used **drugs of abuse** in Germany^[3], Portugal^[4] and Spain^[5]:

- Germany** (2021): Cannabis, cocaine, amphetamines.
- Portugal** (2013-2018): Cannabis, MDMA, cocaine.
- Spain** (2011-2020): Cannabis, cocaine.

Methods

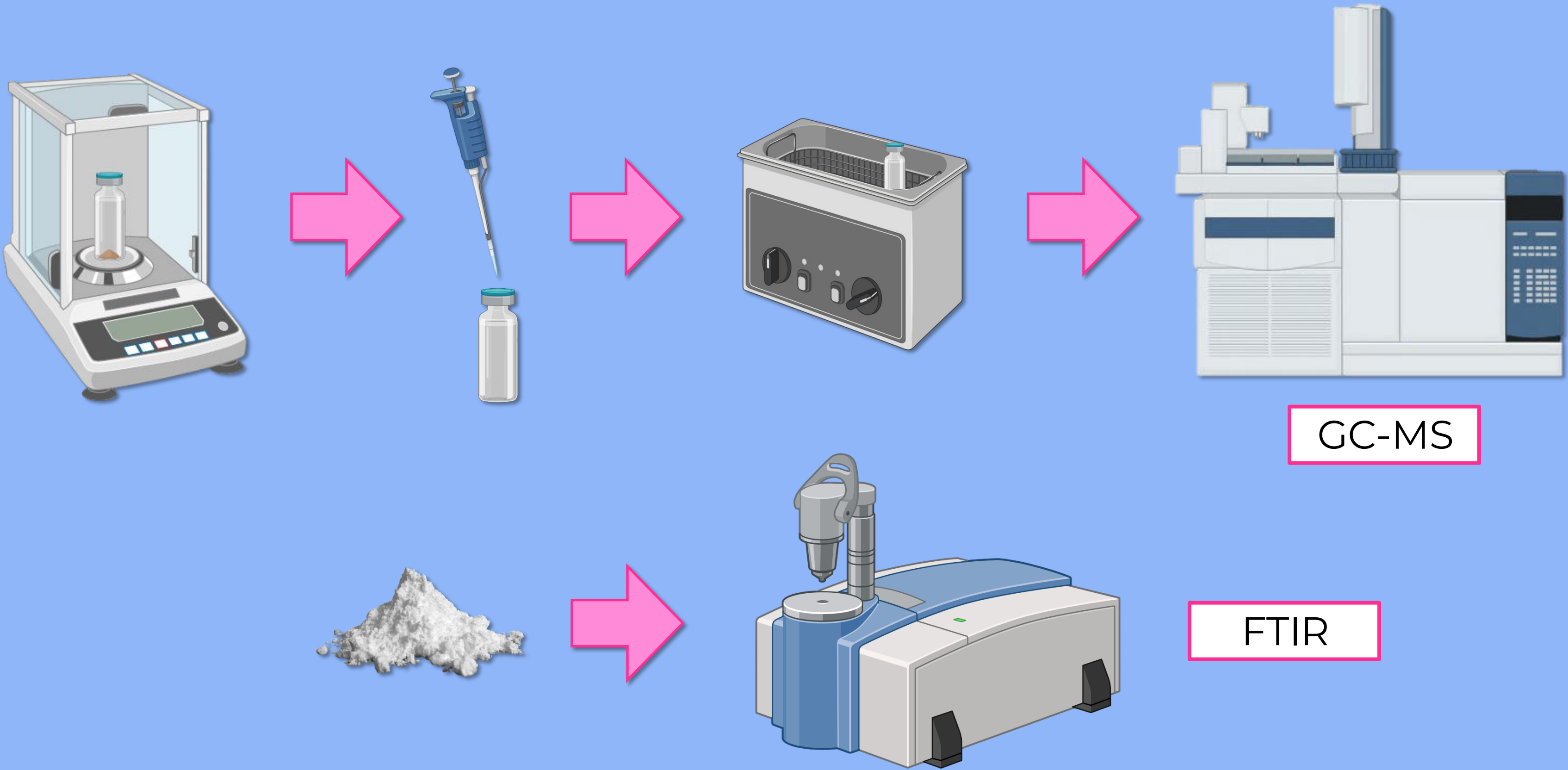


Figure 1 – Overview of the laboratory procedure carried out. GC-MS: Gas Chromatography–Mass Spectrometry; FTIR: Fourier-Transform Infrared Spectroscopy.

Results

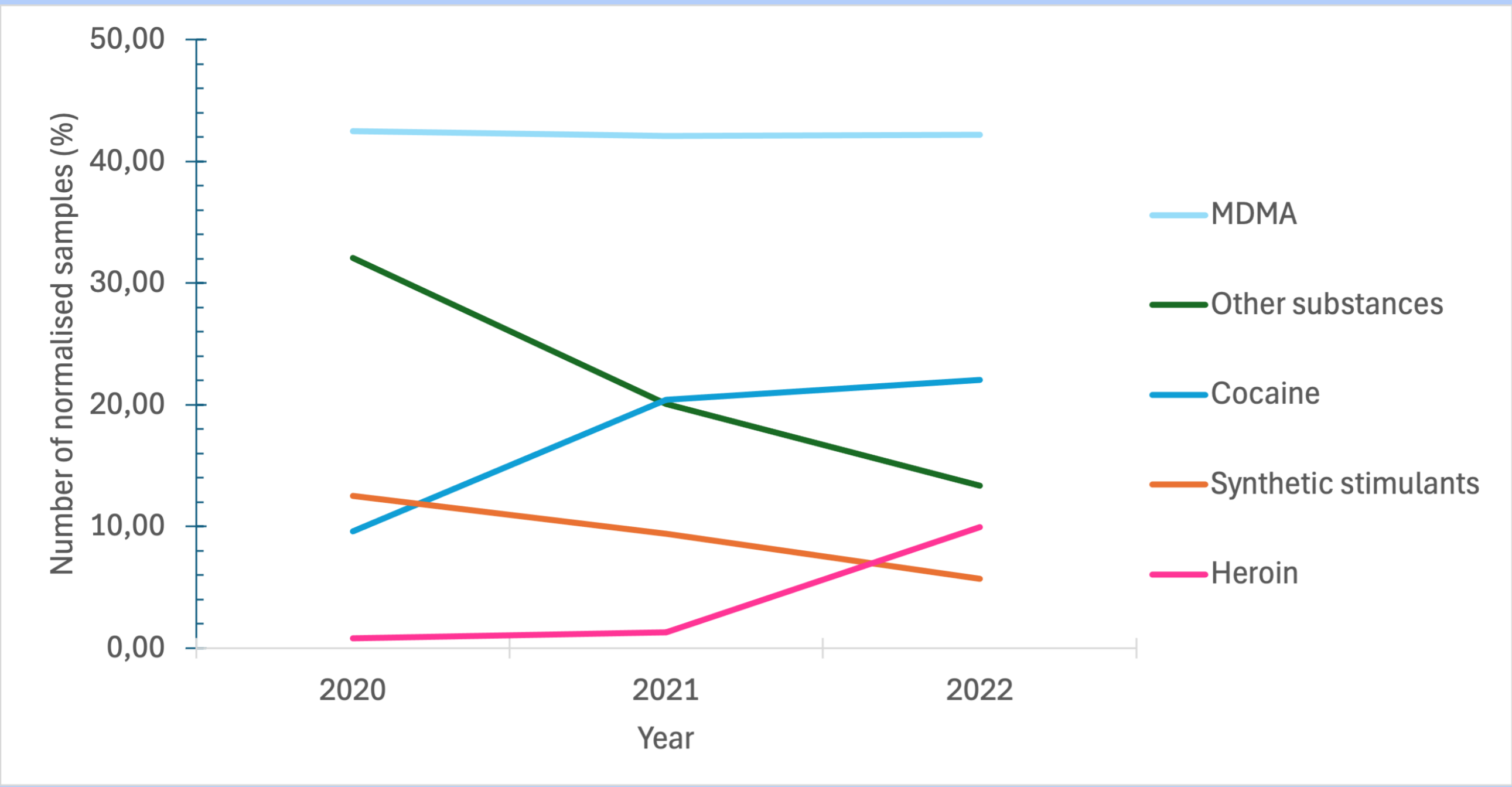


Figure 2 – Drug checking trends between 2020 - 2022. MDMA: 3,4-methylenedioxymethamphetamine.

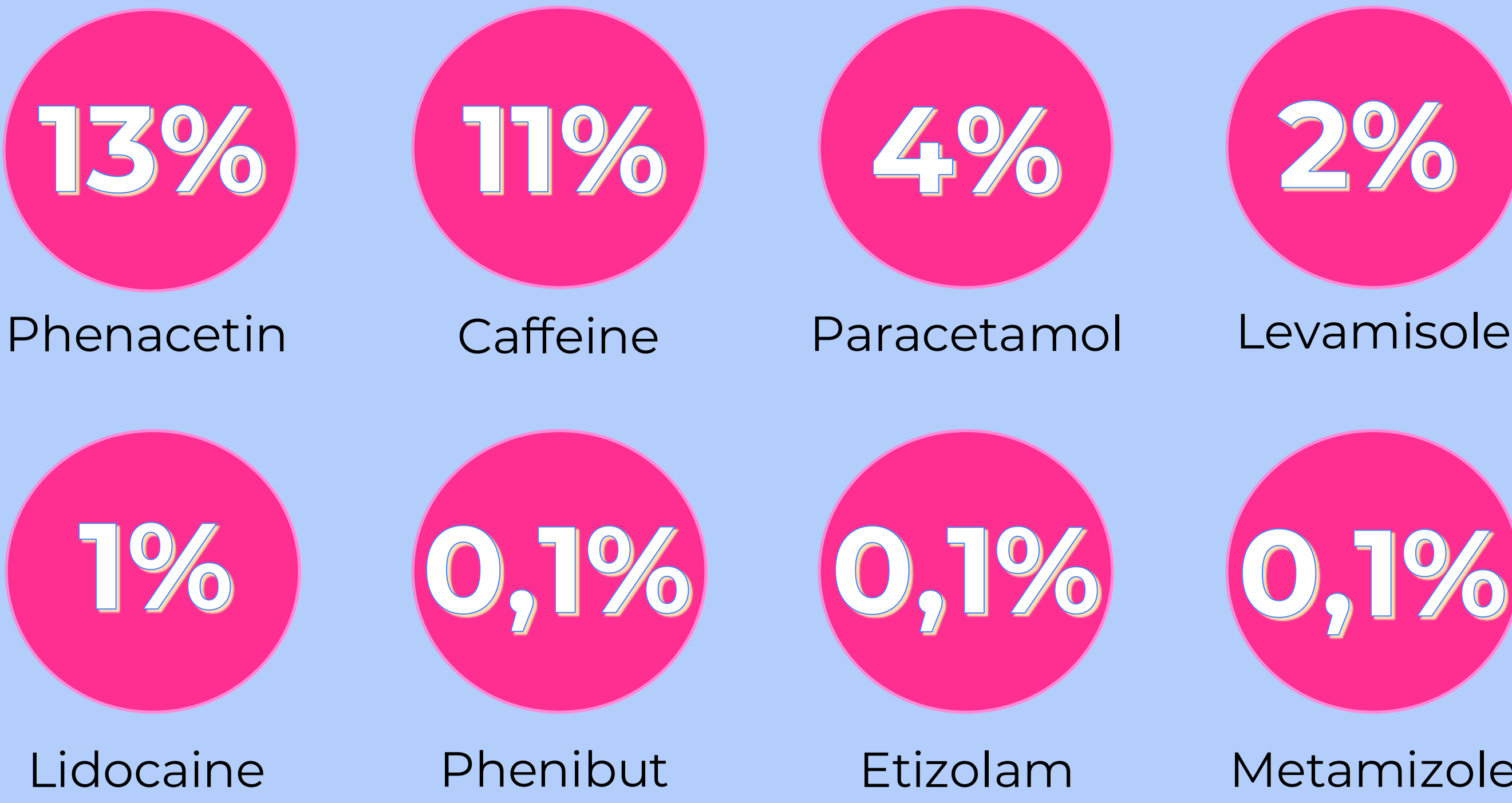


Figure 3 – Adulterants/cutting agents present in the samples between 2020 - 2022.

Conclusions

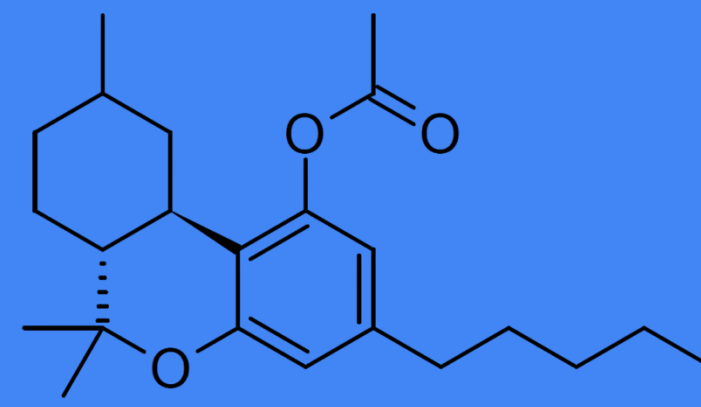
- Increase** in the number of cocaine and heroin samples submitted for drug checking between 2020 - 2022;
- Decrease** observed in synthetic stimulants and other substances over the same period;
- Adulterants/Cutting agents** most commonly found phenacetin, caffeine and paracetamol, particularly in cocaine and heroin samples;
- These analyses help anticipating the **emergence of new substances** on the market.

Acknowledgments

Centro de Química Estrutural is a Research Unit funded by Fundação para a Ciência e a Tecnologia through projects UIDB/00100/2020 (<https://doi.org/10.54499/UIDB/00100/2020>) and UIDP/00100/2020 (<https://doi.org/10.54499/UIDP/00100/2020>). Institute of Molecular Sciences is an Associate Laboratory funded by Fundação para a Ciência e a Tecnologia through project LA/P/0056/2020 (<https://doi.org/10.54499/LA/P/0056/2020>). CiiEM has provided support through Project 10.54499/UIDB/04585/2020, funded by FCT. Work supported by UID/04046/2025 - Instituto de Biosistemas & Ciências Integrativas Centre grant from FCT, Portugal.

Hexahydrocannabinol - HHC (Sample of 2021)

- Semi-synthetic cannabinoid;
- **Identified** in Europe in **2022** (according to European Union Drugs Agency).



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