



Identification of psychoactive substances in used syringes in Tunisia.

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BACKGROUND

Injecting drugs has an implication for public health due to associated risky practices such as sharing or re-using syringes and needles, and sexual behaviour causing an increased risk of bloodborne viral transmissions. Limited information available in Tunisia on injecting drugs to inform health-related and harm reduction policy responses.

OBJECTIVES

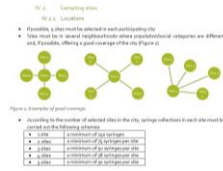
- (i) Provide timely and local information derived from the analysis of the residual content of used syringes.
- (ii) Conduct bio-chemical analysis of 261 syringes spread over the 5 most popular districts of the Tunis area, reflecting More reliable and effective data on injecting drug use
- (iii) is part of the European Syringe Collection and Analysis Project Enterprise (ESCAPE), a comparative case study of the European Neighbourhood and Southern countries.

MATERIALS & METHODS

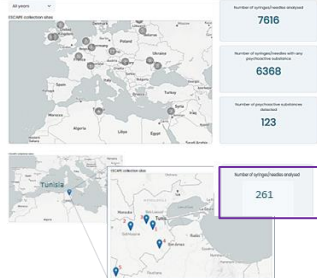
Sampling



The collection campaign of used syringes (n=261) was carried out in the capital Tunis area in the North East of Tunisia (Figure 1), in November 2022. Used syringes were collected and provided the Tunisian Association for Information and Orientation on Aids and Addiction ATIOST in five sites site 1: Helal, site 2: Zahrouni, site 3: El Mellassine, site 4: El Kabaria and site 5: Mohamedia). The collection sites have been selected with the aim to cover five of the most popular districts in the area around the capital, Tunis.



The study was conducted following the generic protocol established by the ESCAPE network, all data were automatically generated by the ESCAPE platform after entering the syringe analysis results one by one to the platform.

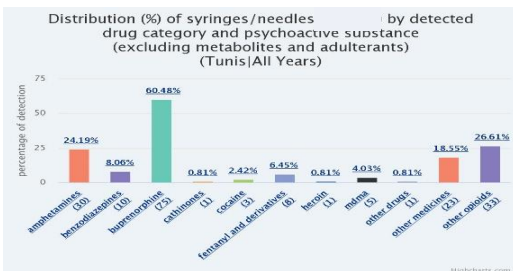


Sample preparation and Analysis by LC-MS/MS

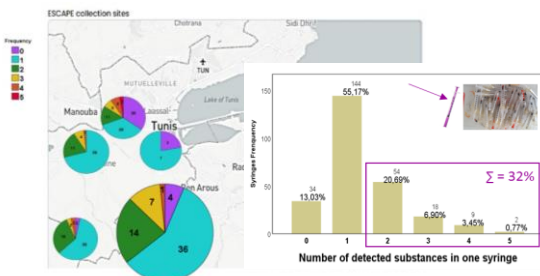
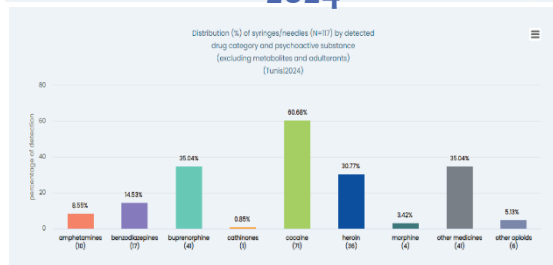


RESULTS & DISCUSSION

2022



2024



CONCLUSIONS

2023: Subutex remains the most commonly injected drug among young Tunisians, followed by amphetamines and tramadol (26% in diverted use: usage détournée).

2024: The analysis revealed that Cocaine (COC) was the most frequently detected substance, appearing in 61% of the total. Buprenorphine (BUP) was the second most common, found representing 35%. Heroin (HER) was detected making up 31%. Methamphetamine (6%), and Amphetamine 3% of the total samples.

>>> A significant number of syringes contain more than one substance, indicating either polydrug use (injecting different drugs) or syringe sharing, which increases the risk of viral contamination, including HIV and Hepatitis C. These patterns highlight the urgent need for harm reduction strategies, such as programs and education on safe injection practices.

Publication

For more results, please visit the Regional report on **Overview of drug markets in the European Neighbourhood Policy-South countries.**



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