Methylone consumption characterized through samples handled by users

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Introduction

In recent years the increasing use of New Psychoactive Substances (NPS) has motivated both awareness and concern about their identification and potential harmfulness. Synthetic cathinones represent a significant proportion of the NPS available and methylone is one of the most frequently found in Europe.

Objectives

The aim of the present study is to determine methylone presence and characteristics from the samples analyzed by Energy Control between the years 2009 and 2015 in Spain.

Methods

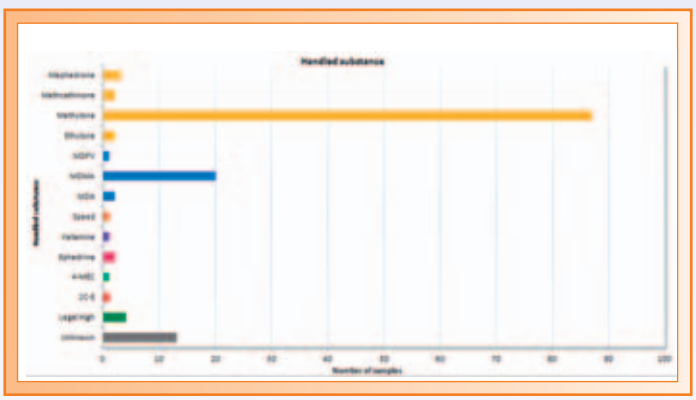
From all 19.817 samples analyzed from August 2009 to August 2015 only those in which methylone was found are selected (n= 140). The samples have been analyzed by Energy Control, a spanish harm-reduction NGO that offers to users the possibility of analyzing the substances they intend to consume. The analysis is done by Thin Layer Chromatography and Gas chromatography–mass spectrometry.

Results

From the 140 samples containing methylone, 87 were handled as methylone, 20 as MDMA, 8 as other synthetic cathinones and 25 as other presentations. The peak of consumption was registered in 2011 with 41 samples and then the number decreased to 10 samples in 2015.

Graphic 1: Year of delivery and number of methylone samples

Graphic 2: Substances found in methylone samples that were handled as



Conclusions

Results suggest that methylone is most frequently handled as methylone or as MDMA and that its consumption could be decreasing. Further pharmacological, clinical and epidemiological studies should be conducted to increase the knowledge about methylone consumption but also about other synthetic cathinones in order to assess their potential risk and to study the complications associated with its use and its clinical management.

Bibliography

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