The 'NpSG' (law on new psychoactive substances) – an effective weapon in the war of drugs?



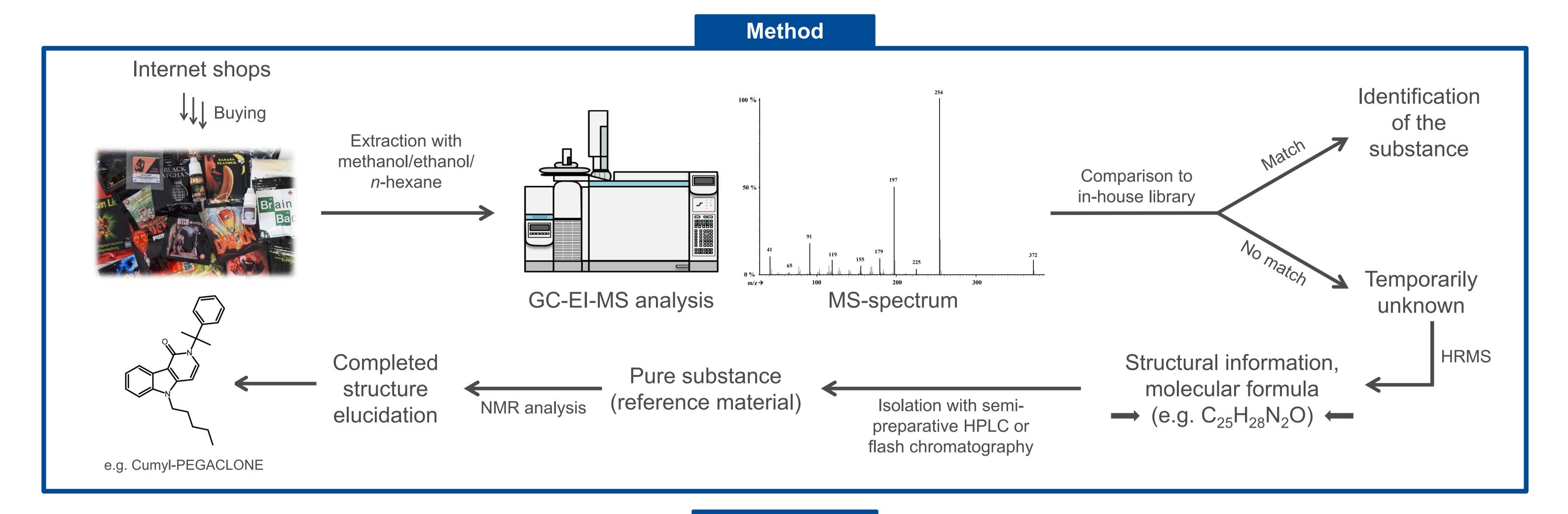
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Introduction

New psychoactive substances (NPS) have become a substantial part of the drug market for many years now. They are mainly distributed via online shops on the Internet in form of products like herbal blends, bath salts, and e-liquids or research chemicals. The German law on new psychoactive substances (NpSG), which came into force on 26 November 2016, controls two substance groups of NPS defined by their chemical structure. Since the end of November, trading with synthetic cannabinoids and substances derived from 2-phenethylamine is punishable by this new law. In the frame of the current EU-project 'SPICE Profiling' which covers a systematic monitoring of the online market, the products mentioned above were bought and analyzed. The aim was to investigate the influence of the NpSG on the online market, especially referring to the offer of NPS covered by the NpSG and new NPS which are currently not covered.



Number of monitored products

<u>Sept 2016 – Apr 2017:</u>

Total: 179
E-Liquids: 9
'Legal hash': 13
Herbal blends: 157

Sept 2016 – Nov 2016: Total: 68

E-Liquids: 0 'Legal hash': 2 Herbal blends: 66

Dec 2016 – Apr 2017: Total: 111

E-Liquids: 9
'Legal hash': 11
Herbal blends: 91

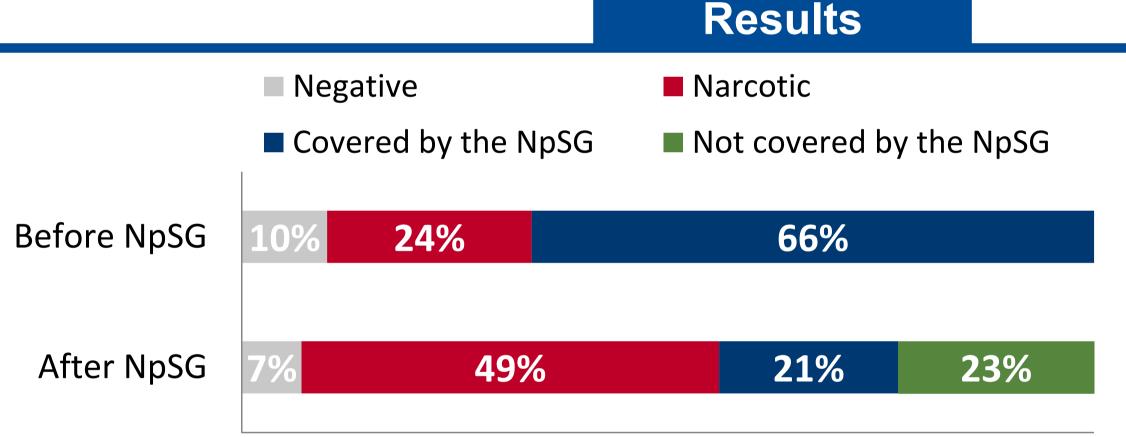


Fig. 1: Relative distribution of ordered products from September 2016 to April 2017 divided into two parts: before and after entry into force of the NpSG.

Fig. 1 shows the relative distribution of the monitored products divided into two periods: before and after the entry into force of the NpSG in November 2016. While 66% of the analyzed products before the NpSG contained NPS covered by the law, the proportion decreased to 21% afterwards. As depicted in Fig. 2, Cumyl-4CN-BINACA was the only substance covered by the NpSG in most cases after the law came into force. Only about 24% of all products bought before the NpSG contained narcotics. Furthermore, in 10% of the analyzed products

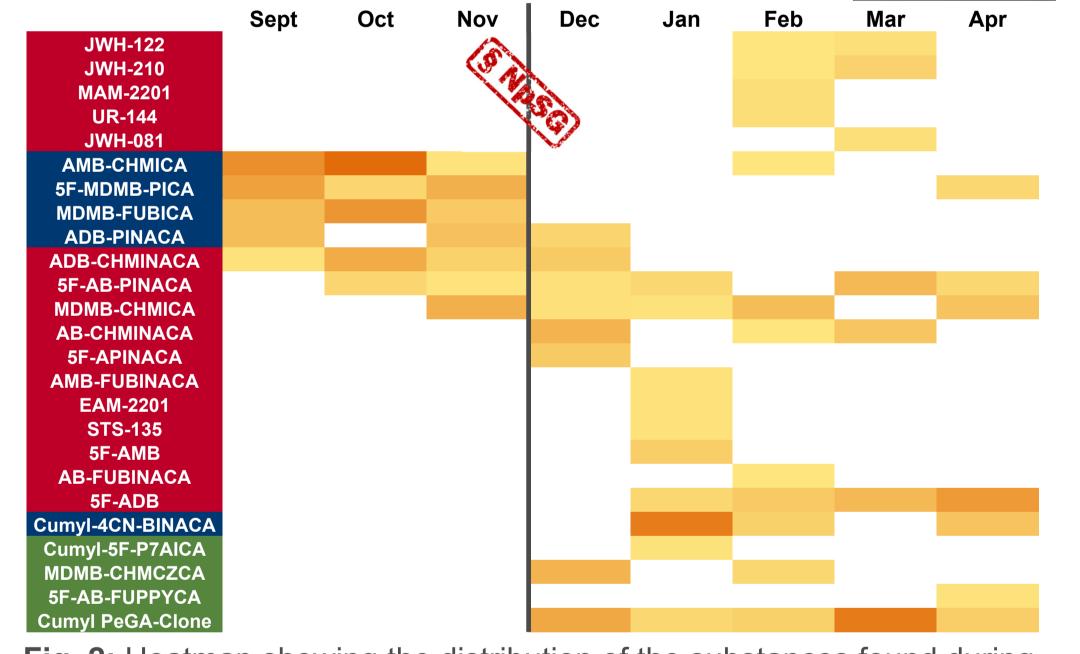


Fig. 2: Heatmap showing the distribution of the substances found during the monitoring on a monthly basis.

no substance was found. Since the entry into force of the law, the proportion of narcotics increased up to 49%. Lastly, 23% of the products ordered since December contained compounds not covered by the NpSG, mainly represented by Cumyl-PEGACLONE, a new synthetic cannabinoid with a γ -carboline core.

Discussion

Several interesting aspects emerged during the period of investigation. While the proportion of narcotics nearly doubled after the entry into force of the NpSG, especially the five narcotics listed at the head of Fig. 2 are eye-catching. These were almost irrelevant in monitored products bought in the last three years. Based on banning most of the NPS by means of the NpSG, some shop owners obviously moved to selling narcotics.

Additionally, right after the NpSG came into force, shops distributed products containing compounds like MDMB-CHMCZCA or Cumyl-PEGACLONE, substances with core structures not covered by the NpSG.

The decrease of the proportion of NPS covered by the NpSG seems to be a positive effect of the new law. At the moment, Cumyl-PEGACLONE is dominating the market.

Conclusion

Since the legal force of the NpSG, vendors have been selling products mostly containing narcotics or NPS not covered by the law due to their core structures (like Cumyl-PEGACLONE). It is very likely that this synthetic cannabinoid was specifically designed for the German market. Despite of the NpSG the offer in the internet is still huge. The product monitoring has to be continued and the NpSG to be extended.

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