NEW DRUGS ON THE INTERNET **– ANALYSIS OF AN ONLINE DRUG DISCUSSION FORUM**

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Recently, the drug market has undergone dramatic changes. In addition to the traditional and established drugs, a number of novel psychoactive substances are being sold. These substances are often sold legally on the Internet as "research chemicals" or "legal highs". By modifying the chemical structure of existing substances, or by creating completely new substances with effects similar to previously known drugs, the current drug legislation is circumvented. Scientific studies of long-term effects, addiction potential, and risks are often missing. The phenomenon of experimenting with drugs bought on the Internet is predominantly an activity practised by young men aged 16-25. The products sold frequently lack content information, safety information, or side-effect warnings. Often the phrase "not for human consumption" is the only information provided. As the number of new drugs is constantly on the rise, there is an urgent need for knowledge and information to support drug prevention and harm reduction efforts. One way of learning more about the new drugs is to analyse young people's discussions on Internet-based forums. The credibility of this information cannot be verified but it does reflect the reality young people encounter on the Internet. So far, this research project has generated four completed sub-studies and more are in progress.

4-HO-MET

4-HO-MET is an Internet drug with hallucinogenic properties similar to psilocin and psilocybin, which are the active substances in the so-called magic mushrooms, traditionally used in medical or religious contexts in contrast to 4-HO-MET, which has only been used for recreational purposes.

A qualitative study for the purpose of investigating the characteristic features of recreational use was initiated. By collecting and analysing self-reports on experiences that were posted anonymously on an Internet forum nine general themes were identified: (1) motivation, preparation and expectation; (2) initial effects; (3) change of perception; (4) unfiltered awareness and intensified flow of information; (5) lateral cognition; (6) border between subject and object is blurred; (7) heaven; (8) hell; and (9) subsiding effects.

Overwhelming and profound mental, emotional,

METHOXETAMINE (MXE)

MXE is an Internet drug with primarily dissociative effects. The chemical structure of the substance is similar to ketamine, which, depending on the dosage, is used both for medical and recreational purposes. A qualitative study with the purpose of identifying the characteristic features of drug-induced effects was carried out. Anonymous reports of experiences

posted on an Internet forum were collected and analysed with a phenomenological approach. The analysis generated ten general themes: (1) preparation, motivation and anticipation; (2) initial effects; (3) malfunction of cognitive processes stabilizing normal state; (4) inner personal processes and learning; (5) emotional processes; (6) altered sensory perception; (7) dissolution and transition; (8) spiritual and transcendental experiences; (9) effects and processes after the experience; and (10) re-dosing and addiction. MXE induced a substantially altered state of consciousness similar to the effects of both classic hallucinogens and ketamine. MXE also seemed to have a high potential for addiction and there were reports of losing control of intake. Feelings of strong fear and anxiety were described, especially if the substance was taken in a chaotic setting or in a high dose. The most effective coping strategy in a situation of great discomfort was "acceptance", which indicates that the MXE users might have great experience of handling similar situations.

"SPICE" – SYNTHETIC CANNABINOIDS

Synthetic cannabinoids are the active substances in smoking mixtures (e.g. Spice, K2 and Kronic), which are sold as legal recreational drug alternative to cannabis (hasch/marijuana). Over a dozen different synthetic cannabinoids have been identified in the smoking mixtures. The effects of these substances are generally stronger than those of traditional cannabis.

Two Internet-based studies of Spice drug forums were carried out. The first study centred on descriptions of Spice product intoxication in the forum. The phenomenological analysis generated seven themes defining the experience, notably that there was a great fascination for the drug effects whether good or bad.

> Smoking Spice was a social activity involving group solidarity as a motivating

and somatic processes took place. The character of the experiences could oscillate between "heaven (euphoria) and "hell" (anxiety and panic), but in spite of this all reporters were satisfied and eager to repeat the experience. The study does not provide grounds for drawing conclusion about drug abuse motives but there is an indication that the pursuit of excitement along with a need to experience something out of the ordinary can be contributing factors. The experiences described share many features with the classic hallucinogenic drugs such as LSD or psilocybin.

To date, no deaths or injuries caused by 4-HO-MET have been reported, but there are individual description of cases treated for transitory psychosis and states of disorientation at the emergency room. The risk of judgement errors and accidents under the influence constitutes a real danger to the users.

Interestingly, the use of this drug seemed to be most common in Sweden; it was impossible to find a sufficient number of texts in English to conduct an analysis.

Feelings of wellbeing and euphoria were also reported along with gaining new perspectives on life. Some described states of personality dissolution, which often culminated in a transcendental experience with a dreamlike scenario or a profoundly spiritual motif. In some cases users reported having to spend hours in the emergency room until the effects had abated. At least one death report has been documented involving MXE in combination with other drugs.

factor and then as a supporting function during unpleasant experiences. Spice apparently produced intoxication with both negative and positive effects. The level of knowledge of the hazards of Spice products among the users was generally low.

The purpose of the second study was to compare the self-reported experiences of the side- effects of synthetic cannabinoids with the effects described in science reports. The study was based on descriptions of side-effects made by 254 users on an Internet forum. Several serious physical effects were mentioned (e.g. tachycardia and difficulty breathing), and also that the drug caused hang-over, addiction, and abstinence.

REFERENCES

Kjellgren, A & Soussan, C. (2011). Heaven and Hell – A phenomenological study of recreational use of 4-HO-MET in Sweden. Journal of Psychoactive Drugs, 43, 211 - 219. Kjellgren, A & Jonsson, K. (2013). Methoxetamine (MXE) - A Phenomenological Study of Experiences induced by a "legal high" available from the Internet.

Journal of Psychoactive Drugs, 3, 276 – 286.

Soussan, C & Kjellgren, A. (submitted). The flip side of "Spice" - The adverse effects of synthetic cannabinoids as discussed on a Swedish Internet forum.

Kjellgren, A., Henningsson, H., & Soussan, C. (submitted). Fascination and social togetherness - Discussion about Spice smoking on a Swedish Internet forum.

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