



Internet and new drugs: a challenge for Public Health

During 2010 41 new psychoactive substances were officially notified to the European Union, nearly double than during the previous year, most of which are available on Internet.

One of these new abused drugs is methoxetamine (MXE), sold as a “legal” alternative to ketamine.

Barcelona, 8th May 2012. A group of researchers from the IMIM (Hospital del Mar Research Institute) and from the INAD (Hospital del Mar Neuropsychiatry and Addictions Institute) has participated in an international study aiming to give a general overview at a chemical, pharmacological and behavioural level of a recently appeared new chemical compound, according to the Recreational Drugs European Network, as a new abused drug: methoxetamine (MXE).

This new drug, similar to ketamine, is a dissociative drug, meaning it distorts visual and auditory perceptions making one feel separated or “dissociated” from the environment and from oneself, without a loss of consciousness. As the researchers explain ***“It seems to increase the sense of humour and has strong hallucinogenic properties”***.

The researchers add that ***“one of the dangers of these new compounds such as MXE is that most of them are not approved for human consumption and consuming them could be associated to an unknown number of side effects and adverse reactions that have not been described”***. Information at a toxicological or pharmacological level as well as on users is nearly nonexistent.

In this sense, these new compounds are becoming more and more sophisticated, are usually synthesized in clandestine laboratories, simply by modifying the molecular structure of the substances that are already controlled, with the aim of maintaining a lack of regulation for the largest possible time, and are rapidly spread over the Internet.

In the specific case of MXE, it would seem that its toxicity and side effects would be similar to those of ketamine, a dissociative anaesthetic used in medicine and veterinary that, when used in sub-anaesthetic doses, leads to a range of effects going from a light drunkenness, perceptive stimulation or distortion to the appearance of death-like experiences or body splitting. The main difference when comparing MXE to ketamine, however, is that the duration and intensity of these effects are longer lasting.

In the study, researchers have detected that stores selling this drug over the internet, are advertising it and selling it as a legal alternative to ketamine, since it can be purchased legally without needing a veterinary licence and at a better price. This has meant that it has become extremely popular among consumers and has affected the risk perception associated to consumption, given that many consumers associate legality to safety.

The combination of new synthetic abusive drugs and the speed at which information is spread over the Internet have caused the experts' concern for toxicological, pharmacological or public health issues increase. Experts consider it necessary to have a greater collaboration at an international level to tackle this phenomenon consisting of easily accessible psychoactive drugs over the internet, which is growing rapidly at present.

This study is part of two projects; the Psychonaut Web Mapping Project and the ReDNet Research Project, funded by the European Commission in the framework of the Public Health Program.

Reference article:

“Phenomenon of new drugs on the Internet: the case of ketamine derivative methoxetamine”.

Ornella Corazza, Fabrizio Schifano, Pierluigi Simonato, Suzanne Fergus, Sulaf Assi, Jacqueline Stair, John Corkery, Giuseppina Trincas, Paolo Deluca, Zoe Davey, Ursula Blaszkowski, Zsolt Demetrovics, Jacek Moskalewicz, Magi Farre, Liv Flesland, Manuela Pasinetti, Cinzia Pezzolesi, Agnieszka Pisarska, Harry Shapiro, Holger Siemann, Arvid Skutle, Aurora Enea, Giuditta di Melchiorre, Elias Sferrazza, Marta Torrens, Peer van der Kreeft, Daniela Zummo and Norbert Scherbaum. **Hum. Psychopharmacol Clin Exp** 2012; 27: 145–149.

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