

Viewpoint

Contents lists available at SciVerse ScienceDirect

International Journal of Drug Policy



journal homepage: www.elsevier.com/locate/drugpo

## 'Legal highs' an inappropriate term for 'Novel Psychoactive Drugs' in drug prevention and scientific debate

Ornella Corazza<sup>a,b</sup>, Zsolt Demetrovics<sup>c,\*</sup>, Wim van den Brink<sup>d</sup>, Fabrizio Schifano<sup>a</sup>

<sup>a</sup> ReDNet Project, School of Pharmacy, University of Hertfordshire, UK

<sup>b</sup> King's College, Institute of Psychiatry, UK

<sup>c</sup> Institute of Psychology, Eötvös Loránd University, Hungary

<sup>d</sup> Academic Medical Center of the University of Amsterdam, The Netherlands

In the past years, we have witnessed an unprecedented opening of the drug market to the rapid diffusion of novel psychoactive compounds, which, combined with the ability of the Internet to advertise and disseminate these products quickly, have raised new challenges to public health internationally (Advisory Council on the Misuse of Drugs (ACMD), 2011: Schifano et al., 2006). Most of these compounds (e.g., piperazines, mephedrone) are substitutes of known stimulant drugs, such as amphetamine, cocaine, or 'ecstasy' (MDMA) (Winstock et al., 2011) while others are the synthetic alternatives of cannabis ('spice') (Fattore & Fratta, 2011). In the 2011 report, the UN International Narcotic Control Board (International Narcotic Control Board (INCB), 2011) declared that the production and distribution of these products was 'out of control,' stating that Japan controlled 51 new drugs, while in Europe, the European early warning system formally warned about 57 of these substances during 2009-2010 (Watson, 2010). Fattore and Fratta (2011) recently identified over 140 synthetic cannabinoids and over 450 compounds and combinations from Psychonaut/ReDnet studies. These drugs are often labelled and marketed as 'legal highs', a colloquial term originated by the mass media that has rapidly entered drug prevention messages and the scientific debates.

We would like to highlight the necessity of reflecting and possibly reconsidering the use of term 'legal highs' in the field of drug prevention and research, as it refers to two ambiguous and undefined characteristics of these products.

The term 'legal' implies the fact that these substances are legally available and often advertised as substitutes of more popular illegal substances. However, as we have seen in the case of mephedrone (4-methyl-methcathinone), their legal status can change quite rapidly in the UK as well as in other countries as a result of the fast drug monitoring and controlling processes in place today (Advisory Council on the Misuse of Drugs, 2011). Consequently, labelling these substances as 'legal' could be misleading especially to young and vulnerable people who are not always well aware of new drug

\* Corresponding author at: Department of Clinical Psychology and Addiction, Institute of Psychology, Eötvös Loránd University, Izabella utca 46, H-1064 Budapest, Hungary. Tel.: +36 30 97 610 97; fax: +36 1 461 2697.

E-mail address: demetrovics@t-online.hu (Z. Demetrovics).

legislation. Furthermore, it must be noticed that suppliers often use this term to emphasize the lack of criminal risks and thus attract more potential users. As some studies have indicated, this term also influences the perception of health risks associated with the consumption of these substances (what is legal is also perceived as safe) (Corazza et al., 2011). As result, when the scientific literature takes over this term, it involuntarily contributes to the propaganda of these substances.

The term 'high' also seems to be problematic. It reflects a smart advertising ploy of suppliers rather than an accurate scientific definition of a product. The major problem with this expression is that it emphasizes the pleasurable and enjoyable effects of these substances. As mentioned, the consumption of these mostly unknown substances is very risky and could have short and long terms adverse consequences on users. Sometimes it has also caused fatalities involving youngsters (Kronstrand, Roman, Thelander, & Eriksson, 2011).

In addition, being part of one of the first prevention programmes designed for novel psychoactive compounds targeting young and vulnerable individuals at 10 research centres across Europe (www.rednetproject.eu) using 8 European languages (English, German, Norwegian, Dutch, Hungarian, Polish, Spanish and Italian), we have observed that the term is misunderstood cross-culturally. In fact, different countries are using different terms, such a 'dopalacze' (Poland), 'smart drugs' (Italy), or simply designer drugs (Hungary).

In conclusion, considering the above consequences, we invite colleagues to avoid the term 'legal highs' in their scientific works and perhaps consider the use of '*novel psychoactive drugs*', also shortened as 'NPD', as far more appropriate. This term is easily understood and translated into different languages. Also, by including the term 'novel', it also reflects to old compounds, which have recently become popular in the drug market. Once again, we would like to emphasize that the term 'legal highs', besides being inaccurate from a scientific point of view, carries the risk of advertisement because of its emphasis on positive, enjoyable effects that are available without any legal consequences. Therefore, using the term might have controversial effects especially in preventive interventions and might lead to increased attention to these substances, making them even more appealing.

<sup>0955-3959/\$ -</sup> see front matter © 2012 Elsevier B.V. All rights reserved. http://dx.doi.org/10.1016/j.drugpo.2012.06.005

## References

- Advisory Council on the Misuse of Drugs (ACMD). (2011). Consideration of the novel psychoactive substances ('legal highs'). London: ACMD.
- Corazza, O., Schifano, F., Farre, M., Deluca, P., Davey, Z., Torrens, M., et al. (2011). Designer drugs on the internet: A phenomenon out-of-control? The emergence of hallucinogenic drug Bromo-Dragonfly. *Current Clinic of Pharmacology*, 6, 125–129.
- Fattore, L., & Fratta, W. (2011). Beyond THC: The new generation of cannabinoid designer drugs. Frontiers in Behavioural Neuroscience, 5, 60.
- International Narcotic Control Board (INCB). (2011). Annual report 2010. United Nations, New York.
- Kronstrand, R., Roman, M., Thelander, G., & Eriksson, A. (2011). Unintentional fatal intoxications with mitragynine and O-desmethyltramadol from the herbal blend Krypton. *Journal of Analytical Toxicology*, 35, 242–247.
- Schifano, F., Deluca, P., Baldacchino, A., Peltoniemi, T., Scherbaum, N., Torrens, M., et al. (2006). Drugs on the web; the Psychonaut 2002 EU project. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 30, 640–646.
- Watson, R. (2010). EU drug monitoring agency voices concerns over "legal highs". British Medical Journal, 341
- Winstock, A. R., Mitcheson, L. R., Deluca, P., Davey, Z., Corazza, O., & Schifano, F. (2011). Mephedrone, new kid for the chop? Addiction, 106, 154–161.