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A Call to Action: The Active Role Psychiatrists and the DEA Must Take to Decrease Harm from Psychotropic Drugs Acquired via the Internet

To the Editor: While the epidemic of opioid overdoses is reaching the national consciousness, we fear another epidemic remains in the shadows: the global rise in procurement of intoxicants and nootropics through the Internet. While data are sparse, the Global Drug Survey 2015 reported that significantly more individuals obtained drugs online in 2014 than in any previous year.¹

The catalyst for our concern is a patient who presented to our hospital with protracted delirium after consuming 2 substances acquired from the Internet: tianeptine sodium salt and CRL-40,940. After his delirium resolved, he reported taking these substances to self-medicate anxiety, in accordance with the website instructions of the online vendor, “newmind.com,” and those given to him by their customer service agent via phone. We determined that his toxic ingestion was not an intentional overdose and diagnosed him with substance intoxication delirium and generalized anxiety disorder.

Tianeptine, one of the substances our patient ingested, is a tricyclic antidepressant, increases serotonin uptake in the brain.² CRL-40,940 (also known as *flmodafinil* and chemically related to modafinil) increases cortical catecholamine levels and impacts serotonin, glutamate, orexin, histamine, and γ -aminobutyric acid levels.³

Members of the public educate themselves on peer-to-peer message board websites (eg, Reddit.com and Erowid.com). Intoxicants and nootropics can be easily procured from a growing number of “dark web” and “surface web” retailers. These vendor websites may make unsubstantiated claims and are currently unregulated.⁴

Websites market their products as “legal” alternatives, contributing to a perception of greater safety compared to traditional illicit drugs.⁵ The popularity of Internet-acquired substances has also been connected to novelty, accessibility, and ability to be undetectable on a standard urine drug screen.^{5,6}

We contacted the US Food and Drug Administration (FDA), US Drug Enforcement Agency (DEA), and Federal Trade Commission for comment and to express concern. The DEA reported difficulty controlling the online marketplace, as online retailers and substances continually adapt to stay one step ahead of the law. In this light, we suggest several steps that should be taken without delay:

1. Physicians should inquire if their patients are consuming psychotropic substances obtained via the Internet. Providers must therefore be knowledgeable of the terminology (eg, RC’s [“research chemicals”]) and the online references (eg, Erowid) that patients are utilizing.⁷
2. High-risk patients should be screened by gas chromatography–mass spectrometry, which can identify the drug class of hundreds of known substances.⁸

3. Funding and insurance coverage should be expanded to cover the drug testing outlined in #2.
4. The DEA should increase collaboration with their international counterparts to exercise oversight of these online marketplaces and to provide education to the public. We support an action plan similar to the FDA’s plan for the opioid abuse epidemic.⁹
5. Providers must also educate elected officials to this growing public health crisis and advocate for action.

Educating our patients, policymakers, and the public with regard to the risks associated with consuming drugs obtained over the Internet will counterbalance the unsubstantiated claims over websites and their representatives. Our actions will decrease a false perception of safety and help individuals avoid untoward consequences by guiding them to well-studied and efficacious psychopharmacologic and psychotherapeutic treatment options.

REFERENCES

1. Pegg D. Global Drug Survey 2015 shows more people buying online than ever before. *The Guardian*. June 7, 2015. <https://www.theguardian.com/society/datablog/2015/jun/08/global-drug-survey-2015-buy-online-darknet-silk-road>.
2. Wagstaff AJ, Ormrod D, Spencer CM. Tianeptine: a review of its use in depressive disorders. *CNS Drugs*. 2001;15(3):231–259.
3. Battleday RM, Brem AK. Modafinil for cognitive neuroenhancement in healthy non-sleep-deprived subjects: a systematic review. *Eur Neuropsychopharmacol*. 2015;25(11):1865–1881.
4. Van Buskirk J, Roxburgh A, Bruno R, et al. *Drugs and the Internet, Issue 5*. Sydney, Australia: National Drug and Alcohol Research Centre; 2015.
5. Weaver MF, Hopper JA, Gunderson EW. Designer drugs 2015: assessment and management. *Addict Sci Clin Pract*. 2015;10:8.
6. Vandrey R, Johnson MW, Johnson PS, et al. Novel drugs of abuse: a snapshot of an evolving marketplace. *Adolesc Psychiatry (Hilversum)*. 2013;3(2):123–134.
7. Research chemical FAQ: experimental and research chemicals used asp, by EROWID & MURPLE. Erowid website. https://www.erowid.org/psychoactives/research_chems/research_chems_faqs.html. Updated June 4, 2010. Accessed February 26, 2016.
8. Nair H, Woo F, Hoofnagle AN, et al. Clinical validation of a highly sensitive gc-ms platform for routine urine drug screening and real-time reporting of up to 212 drugs. *J Toxicol*. 2013;2013:329407.
9. Califf RM, Woodcock J, Ostroff S. A proactive response to prescription opioid abuse. *N Engl J Med*. 2016;374(15):1480–1485.

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