- Valmaggia LR, Byrne M, Day F et al. Br J Psychiatry 2015;207:130-4.
- Fusar-Poli P, Diaz-Caneja CM, Patel R et al. Acta Psychiatr Scand 2016;133: 76-85.
- Schimmelmann BG, Michel C, Martz-Irngartinger A et al. World Psychiatry 2015;14:189-97
- Michel C, Schimmelmann BG, Schultze-Lutter F. Early Interv Psychiatry 2016;10(Suppl. 1):129.
- Fusar-Poli P, Cappucciati M, Borgwardt S et al. JAMA Psychiatry 2016;73: 113-20
- 6. Fusar-Poli P, Rocchetti M, Sardella A et al. Br J Psychiatry 2015;207:198-206.
- 7. Fusar-Poli P, Schultze-Lutter F. Evid Based Ment Health 2016;19:10-5.
- Fusar-Poli P, Schultze-Lutter F, Cappucciati M et al. Schizophr Bull 2016; 42:732-43.

- Fusar-Poli P, Cappucciati M, Rutigliano G et al. World Psychiatry 2015;14: 322-32
- Schneider M, Armando M, Pontillo M et al. World Psychiatry 2016;15: 259-65.
- 11. Schmidt A, Cappucciati M, Radua J et al. Schizophr Bull (in press).
- Calkins ME, Moore TM, Satterthwaite TD et al. World Psychiatry 2017;16:
  62-76
- 13. Fusar-Poli P, Rutigliano G, Stahl D et al. JAMA Psychiatry 2016;73:1260-7.

DOI:10.1002/wps.20405

## Drug use disorders: impact of a public health rather than a criminal justice approach

The Outcome Document of the 2016 United Nations General Assembly Special Session on drugs (UNGASS 2016), unanimously approved by the 193 Member States, has recognized "drug addiction as a complex multifactorial health disorder characterized by chronic and relapsing nature" that is preventable and treatable and not the result of moral failure or a criminal behavior. Historically, most nations' strategies for addressing substance use disorders have centered on punishment, and thus recognition of the need to shift from a criminal justice to a public health approach represents a major shift in mentality by United Nations Member States.

This achievement was the result of a continuous dialogue between policy makers and the scientific community during recent sessions of the United Nations Commission on Narcotic Drugs. In 2015, the United Nations Office of Drugs and Crime and the World Health Organization created an Informal International Scientific Network, consisting of experts in addiction sciences, to advise the Commission. Network members were appointed by Member States and represented widely diverse geographical regions, political systems, and cultures.

The Network's input for the Commission's preparation of UNGASS 2016 provided the scientific support for the concept that substance use disorders are brain disorders<sup>1</sup>; that they can be treated; that people with even the most severe forms can recover with access to evidence-based treatment and social supports<sup>2</sup>; and that criminal sanctions are ineffective at preventing or addressing these disorders. It also highlighted evidence-based approaches to drug policy based on public health principles, emphasizing social protection and health care instead of conviction and punishment.

The Network issued eight recommendations, which were adopted unanimously by all the United Nations Member States at UNGASS 2016 and summarized in the Outcome Document of that meeting. These recommendations are a testament to a momentous shift in mentality, to which science and the Network have contributed.

The recommendations are as follows:

- Eliminate stigma and discrimination toward individuals with substance use disorders. Increasing public awareness of addiction/dependence as a chronic but treatable disorder is needed to overcome stigma and promote a shift from exclusion and blame toward support and compassion. This should include national policies that address substance use disorders as neurobiological disorders having complex social and developmental underpinnings.
- Address substance use disorders as public health problems instead of criminal justice issues. A comprehensive public health approach should offer accessible evidence-based prevention, treatment, and recovery options to drug users, and engage those who commit criminal offences in evidence-based treatment during and following, or in lieu of, incarceration, to prevent relapse and recidivism. It also includes nal-oxone distribution for overdose prevention<sup>3</sup>, and integration of treatment of substance use disorders with prevention and treatment of infectious diseases (HIV and hepatitis C)<sup>4</sup> and of co-occurring psychiatric conditions<sup>5</sup>.
- Implement evidence-based prevention programs. Substance use disorders are fully preventable. The use of evidence-based prevention programs, both universal and targeted to high-risk individuals, has shown positive outcomes in reducing drug initiation and escalation of use. Since prevention programs address risk and protective factors that are common to a range of behavioral problems, they produce positive outcomes not just in drug taking but also in reducing aggression, early pregnancies, and drugged driving, and improve mental health and educational outcomes. Highest priority should be given to interventions targeting children and youth, since the earlier the use of drugs the greater the risk for substance use disorders and the higher their severity<sup>6</sup>.
- Implement evidence-based treatments for substance use disorders. Abundant research shows that these disorders are treatable and that people do recover when given evidence-based care, including behavioral therapies for all these disorders and medication-assisted treatments for alcohol and opioid use disorders and for smoking cessation<sup>7,8</sup>. However,

**World Psychiatry** 16:2 - June 2017 **213** 

because changes in the brain function in these disorders can be long-lasting, an individual may be at increased risk for relapse even after years of abstinence. Effective treatment thus requires a chronic care model as used for other chronic conditions such as cardiovascular disease or diabetes, which along with routine screening should be integrated into the general health care system and be affordable and accessible.

- Collect and utilize scientific data and engage scientific experts in policy making. Reliable epidemiological data on the economic and social factors that contribute to drug use and substance use disorders should be gathered and analyzed to drive planning and evaluation of drug policy interventions and decision making. The scientific community should provide knowledge of effective prevention and treatment interventions as well as training in their implementation and ongoing evaluation. Member States should establish national early warning systems to monitor changing drug trends and identify emerging public safety and health threats.
- Engage diverse stakeholders in coordinated policy making. Because of the complexity of the health and safety issues related to substance use disorders, policy makers should involve diverse stakeholders, including public health, education, law enforcement, science, and health care systems, as well as solicit input from countries with different cultures, resources, and experiences. Stakeholders should cooperate in the planning, implementation, and evaluation of science-informed interventions and policies that address the demand as well as the supply of drugs. This would include diverting offenders into treatment, combating drug production and trafficking, creating alternative opportunities for communities dependent on the drug trade, and ensuring the safety and protection of the most vulnerable as it relates to drug taking but also engagement in drug trading.
- Support drug-related research. Ongoing research must address the effects of drugs (especially emerging new synthetic drugs) on the brain and behavior; the social and public health impact of different drug policies; the best ways to tailor prevention and treatment modalities to different cultural contexts; and the therapeutic potential of controlled substances (e.g., cannabinoids). Regulatory impediments to conducting research on scheduled drugs should be minimized and policies that facilitate research across these areas implemented.
- Ensure access to scheduled medications for therapeutic use. Some controlled and dependence-producing psychoactive drugs are necessary medicines for treating serious health conditions. The international drug conventions are designed to ensure legitimate medical access to such medicines, under appropriate supervision, through a distribution chain that deters and combats illicit manufacture, sale, and diversion. Necessary steps should be taken to remove barriers to access-

ing controlled drugs for legitimate medical needs, such as analgesic drugs in the more than 150 countries where pain is undertreated<sup>9</sup>.

The public health goal of reducing the world's drug problems cannot be achieved without addressing substance use disorders with the same scientific rigor, compassion, and commitment that other physical and mental health problems are addressed. Substance use disorders are common psychiatric disorders, and access to affordable, quality health care for such disorders has been declared an inherent right for all United Nations Member State citizens.

The strong consensus reached by the Network – scientists representing very different countries that have widely varying policies, political views, and stages of development – is an unprecedented and positive step toward a world where science guides nations' approach to drug misuse and its associated health and safety consequences. Adopting these recommendations will be crucial to fulfilling Member States' joint commitment to effectively address and counter the world drug problem.

## Nora D. Volkow<sup>1</sup>, Vladimir Poznyak<sup>2</sup>, Shekhar Saxena<sup>2</sup>, Gilberto Gerra<sup>3</sup>, and the UNODC-WHO Informal International Scientific Network

<sup>1</sup>National Institute on Drug Abuse, National Institutes of Health, Bethesda, MD, USA; <sup>2</sup>Department of Mental Health and Substance Abuse, World Health Organization, Geneva, Switzerland; <sup>3</sup>Drug Prevention and Health Branch, United Nations Office on Drugs and Crime, Vienna, Austria

The authors alone are responsible for the views expressed in this article and they do not necessarily represent the views, decisions or policies of the institutions with which they are affiliated. The authors thank E.M. Wargo for his valuable editorial work. The members of the Network are C.F. Damin, G. Fischer, T. Mota Ronzani, S.T. Zhenkova, M. Zhao, Z. Liu, O. Scoppetta Diaz Granados, M. Mahfouz, P. Arwidson, T. Pfeiffer-Gerschel, E. Adjei-Acquah, R. Lal, S. Ben Ezra, P. Rosca, C. Leonardi, I. Maremmani, M.T. Matar, J.A. Villatoro Velazquez, J. Toufiq, I. Obot, J.G. Bramness, K.M. Ostaszewski, M.J. Rodrigues Dias, S.N. Al-Emadi, E.A. Bryun, G. Korchagina, E. Krupitskiy, O.A. Alibrahim, T. Hernandez Fernandez, N. Stenström, M.P. Schaub, M. Boyle, I. Grant, S. Gust, A.T. McLellan, N.D. Volkow, S. Weiss, G. Campello, E. Mattfeld, E. Saenz, A. Busse and N. Clark.

- 1. Volkow ND, Koob GF, McLellan AT. N Engl J Med 2016;374:363-71.
- 2. Chandler RK, Fletcher BW, Volkow ND. JAMA 2009;301:183-90.
- World Health Organization. Community management of opioid overdose. Geneva: World Health Organization, 2014.
- World Health Organization. WHO, UNODC, UNAIDS technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users. Geneva: World Health Organization, 2012.
- World Health Organization. mhGAP intervention guide for mental, neurological and substance use disorders in non-specialized health settings. Geneva: World Health Organization, 2010.
- Robins LN, Przybeck TR. Age of onset of drug use as a factor in drug and other disorders. Bethesda: National Institute on Drug Abuse, 1985.
- National Institute on Drug Abuse. Principles of drug addiction treatment: a research-based guide (3rd ed). Bethesda: National Institute on Drug Abuse, 2012.
- World Health Organization. Guidelines for the psychosocially assisted pharmacological treatment of opioid dependence. Geneva: World Health Organization, 2009.
- 9. Berterame S, Erthal J, Thomas J et al. Lancet 2016;387:1644-56.

DOI:10.1002/wps.20428