### **EPP1384**

# "New" drugs associated with chemsex? 2C-B in sexual context. A case report and review

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**Introduction:** The intentional use of drugs before or during sexual intercourse (chemsex), due to its impact on mental health, is a phenomenon of high importance in men who have sex with men. **Objectives:** We report the case of a patient with polysubstance acute intoxication, including 2C-B, in order to review the evidence about the mechanisms of action of 2C-B, its effects on sexual pleasure, toxicity, patterns of abuse and somatic and mental health related consequences it may present.

Methods: Case report and narrative review.

**Results:** We present the case of a patient using 2C-B as a substance in chemsex practice. As the patient presented in our emergency with psychotic symptoms, he was diagnosed with "stimulant acute intoxication" and "acute psychotic symptoms induced by stimulants". 2C-B increases dopamine (DA) serotonin (5-HT) and norepinephrine (NE) and cause stimulating and hallucinogenic effects.

**Conclusions:** MSM is a group vulnerable to the problematic use of drugs in a sexual context. Several mental health problems have been associated with chemsex users such as psychotic sypmptoms, suicidal ideation, encephalopaty, delirium. Polysubstance use is common in chemsex practice and it can be difficult to identify the drugs used in states of acute intoxication but psychiatrists must explore the use of differents drugs from the "classic chemsex drugs" (mephedrone, GHB and metanphetamine) including 2C-B and other substances such as cocaine, MDMA, ketamine, and other cathinones different from mephedrone.

Keywords: chemsex; NPS; MSM

### **EPP1382**

# N-acetylcysteine can be the key to tackling substance use disorders

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**Introduction:** N-acetylcysteine (NAC) is a precursor of cysteine and glutathione, widely known as an antidote to paracetamol overdose. Its role as precursor of an antioxidant and modulating agent of glutamatergic, dopaminergic, neurotropic and inflammatory pathways, raised interest in its application in psychiatric disorders. NAC emerges as a promising therapeutic agent in substance use disorders (SUD) and provides a treatment option in a field with limited and suboptimal therapies.

**Objectives:** To describe the use of NAC in SUD (tobacco, cocaine, cannabis, methamphetamine and alcohol), its potential mechanisms and clinical application.

**Methods:** The literature was searched using the Pubmed database with the following keywords "N-acetylcysteine", "Substance use disorders" and "Psychiatry". Retrieved papers (2011-2018) were selected according to their relevance.

**Results:** SUD results in disruption of glutamate system, in nucleus accumbens, a critical brain area in the rewarding system. NAC reestablishes glutamate homeostasis restoring function of the cysteine-glutamate exchange in glial cells and reversing the down-regulated GLT-1 receptor. Concerning its properties, evidence suggests that NAC is able to decrease drive, craving or compulsion to consume, making it particular useful in relapse prevention after achieving abstinence.

**Conclusions:** NAC has revealed itself as a promising therapeutic agent in SUD and its safety profile and favourable tolerability, as well as being an over-the-counter medication, adds to its interest. Data is still preliminary for the use of NAC in psychiatry disorders, due to the relatively small number of trials and their heterogeneous methodology. Larger studies are needed to confirm efficacy, optimal doses, long-term tolerability and side effects.

Keywords: N-acetylcysteine; psychiatry; Substance Use Disorder

#### **EPP1383**

Management of tobacco dependence in patients with severe mental illness in german-speaking countries: A literature review.

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**Introduction:** A standardized approach to reduce or decrease the tobacco consumption is not performed. It is being used as a medium to socialize having an educational character on nursing and medical relationship.

**Objectives:** Current cessation program are thought for patients without relevant cognitive impairments. Evidence about alternative management for this patient subgroup was collected.

**Methods:** This investigation examined the state of the implementation of nicotine cessation therapy for chronic psychiatric patients in Germany, Austria and Switzerland. German- and Englishspeaking publications since 2010 were selected. 12 different reviews and control trials were included.

**Results:** Inpatient experiences from maximum hospital care in Germany have been published in the last 10 years, but mostly by oncologist departments in collaboration with pulmonologists and cardiologists showing a poor interest from psychiatrists, not even for harm reduction strategies in patients with severe mental illness. Therefore, the identification and treatment of nicotine addiction remains very low in patients with mental health conditions. Cognitive and pharmacological interventions are not covered by the German health system.

**Conclusions:** Latest evidence suggests that more flexible, openended, combination approaches of pharmacotherapy and counselling may be more successful. It will hence contribute to redressing the significant health and social inequities experienced by this. population sub-group as a consequence of tobacco smoking.

Keywords: nicotine dependence; Severe mental illness