"Enhancing the experience: Sexualized drug use among HIV negative men who have sex with men"

David CHROMY, MD

david.chromy@meduniwien.ac.at

Department of Dermatology, Medical University of Vienna, Vienna, Austria

A significant number of men who have sex with men (MSM) engages in sexualized drug use (also known as 'chemsex'). MSM are three times more likely to use illicit drugs than heterosexuals. The reported prevalence of 'chemsexers' among MSM ranges from 3-29% in industrialized countries. Typical substances used for 'chemsex' are metamphetamine, mephedrone, gamma-hydroxybutyrate/gamma-butyrolactone (GHB/GBL), cocaine and ketamine. Of note, while alcohol, cannabis and poppers (alkyl nitrites) are often used concomitantly during 'chemsex', they are usually excluded from the defining substances.

These substances are often used in various combinations to enhance the sexual experience. Some act as stimulants and thus enable sex with multiple partners for a prolonged period of time - 'chemsex'-parties can last from several hours to multiple days. Furthermore, sexualized drug use is associated with sex-practices like condomless anal intercourse, fisting or shared use of sex toys.

Due to the prolonged and traumatic nature of some of these practices, mucosal damage and subsequent transmission of bacterial or viral infections occur more often. Nasal consumption facilitates HCV transmission and intravenous drug use (in this context referred to as 'slamsex') promotes transmission of blood-borne viruses in general.

As a consequence, the incidence of sexually transmitted infections (STI) and the prevalence of infections with the human immunodeficiency virus (HIV) are high among MSM engaging in 'chemsex'. And while a sufficient tool to avert new HIV infections exists since the introduction of pre-exposure prophylaxis for HIV (PrEP), it's introduction has also caused 'risk compensation'. This term refers to an increased willingness for high-risk sex-practices, in the absence of the risk of acquiring HIV.

In summary, the behavioural pattern referred to as 'chemsex', currently observed predominantly among HIV positive and negative MSM, brings challenges for specialists for infectious diseases, psychiatry and social workers. The dynamic international network among MSM enables both fast distribution of trends in substance use as well as the spread of infections. Future projects investigating the management of affected patients will require an interdisciplinary approach to account for the sociological and medical issues raised by 'chemsex'.

- 1. Maxwell S, Shahmanesh M, Gafos M. Chemsex behaviours among men who have sex with men: A systematic review of the literature. Int J Drug Policy **2019**; 63: 74-89.
- 2. Glynn RW, Byrne N, O'Dea S, et al. Chemsex, risk behaviours and sexually transmitted infections among men who have sex with men in Dublin, Ireland. Int J Drug Policy **2018**; 52: 9-15.
- Gonzalez-Baeza A, Dolengevich-Segal H, Perez-Valero I, et al. Sexualized Drug Use (Chemsex) Is Associated with High-Risk Sexual Behaviors and Sexually Transmitted Infections in HIV-Positive Men Who Have Sex with Men: Data from the U-SEX GESIDA 9416 Study. AIDS Patient Care STDS 2018; 32(3): 112-8.
- Pufall EL, Kall M, Shahmanesh M, et al. Sexualized drug use ('chemsex') and high-risk sexual behaviours in HIV-positive men who have sex with men. HIV medicine 2018.