

Chemsex, sexualized drug use and emotional vulnerability among MSM of a pilot survey of an STI/HIV center

S. Capodieci, M. Zaccarelli, C. Stingone, E. Giuliani, V. Cafaro, L. Gianserra, M.G. Donà, A. Latini, M. Giuliani

HIV/AIDS Unit San Gallicano Dermatological Institute IRCCS, Rome, Italy

Introduction

- Chemsex consists of intentional use of psychoactive substances during group sex to facilitate and enhance sexual experience
- It represents a variant of sexualized-drug-use (SDU), mainly observed among Men who have sex with men (MSM)
- Behavioral studies showed that chemsex differs from other forms of SDU, mainly by the type of psychotropic substances used, length of sessions, risks for health and participation modalities such as venues and ways to find chemsex partners
- Additionally, PLWH are more prone to engage in chemsex than HIV-negative counterparts
- Chemsex may be related to poor mental health, in particular, high levels of anxiety and depression symptoms

Study Design

- A pilot survey study was conducted to assess the prevalence, characteristics, correlates of chemsex and emotion vulnerability in MSM attending an STI/HIV center
- A self-administered anonymous questionnaire was developed based on current literature and clinical experience
- The questionnaire consists of different sections which investigate multiple areas shown in Table 1
- Anxiety and depression vulnerability was also assessed including Patient Health Questionnaire-2 (PHQ-2) and Generalized Anxiety Disorder – 2 (GAD-2) in the questionnaire

Demographic Characteristics	HIV/STIs Pre and Post exposure Prophylaxis
Alcohol and Smoking habits	PHQ-2
STI's and HIV History	GAD-2
Sexual habits	Sexualized Drugs use
CHEMSEX	

Methods

- The questionnaire was proposed to consecutive MSM attending the STI/HIV center of the San Gallicano Dermatological Institute in Rome, Italy, from 1st to the 30th of November 2023
- The participants who agreed to participate in the survey put the filled questionnaire in a ballot box outside of the consultation room

References

- Latini, A., et al. (2019). Recreational drugs and STI diagnoses among patients attending an STI/HIV reference clinic in Rome, Italy. *Sexually Transmitted Infections*, 95(8), 588-593
- Maxwell, S., et al. (2019). Chemsex behaviours among men who have sex with men: A systematic review of the literature. *The International Journal on Drug Policy*, 63, 74-89
- Rosas Cancio-Suárez, M., et al., (2023). Prevalence, characteristics, and associated risk factors of drug consumption and chemsex use among individuals attending an STI clinic (EpiTs STUDY). *Frontiers in Public Health*, 11
- Kroenke, K., et al., (2003). The Patient Health Questionnaire-2: validity of a two-item depression screener. *Medical Care*, 41(11), 1284-92.
- Kroenke, K., et al., (2007). Anxiety disorders in primary care: prevalence, impairment, comorbidity, and detection. *Annals of Internal Medicine*, 146(5), 317-325

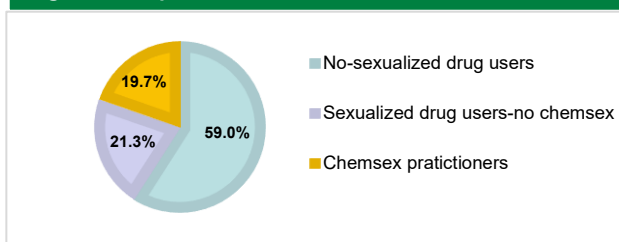
Results

- 122 MSM accepted to fill out the questionnaire
- Demographic characteristics of respondents are shown in Table 2
- 57 out of 119 (47.3%) MSM tested for HIV declared to be PLWH on ART
- 59% of MSM referred no-SDU (median age: 46, IQR 37-56); 21.3% MSM referred SDU non-chemsex (median age: 43, IQR 36-50) and 19.7% referred chemsex (median age: 44, IQR 38-50) (Fig.1)
- More than half of those practicing chemsex (58.3%) were PLWH

Table 2. Demographic characteristics of respondents

	No-SDU n(%)	SDU-no chemsex n(%)	Chemsex n(%)	p value
Educational level				
Post-secondary	32(44.4)	11 (42.3)	15(62.5)	0.41
≤ Secondary	40(55.6)	15 (57.7)	9(37.5)	0.16
Marital Status				
Married	17(23.6)	2(7.7)	3(12.5)	0.06
Not married	55(76.4)	24(92.3)	21(87.5)	0.57

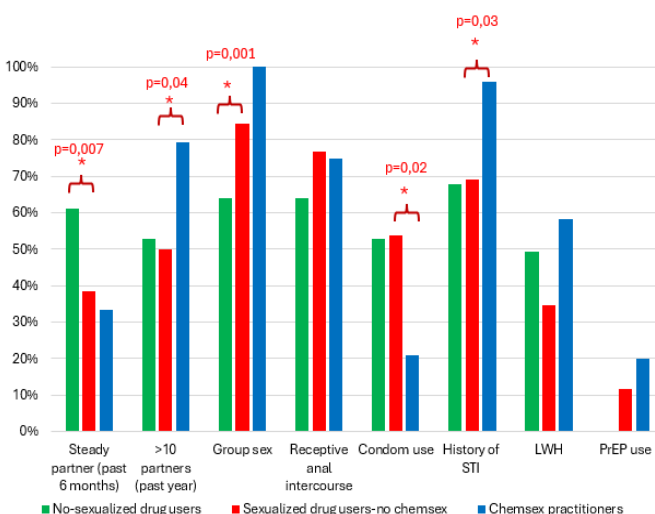
Figure 1. Proportion of non-SDU, SDU and Chemsexers



BEHAVIORAL CHARACTERISTICS BY DRUGS USE

With respect to non-consumers, consumers of any drug for sex were more prone to refer to a non-steady partnership and to engage in group sex. Chemsex practitioners were more prone to use condom inconsistently, to refer to a history of STIs, and to have more than 10 recent sexual partners in the previous year than sexualized drug users (Fig. 2)

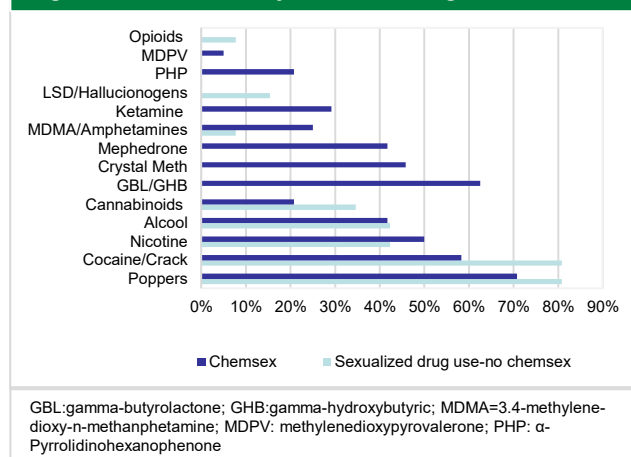
Figure 2. Behavioral characteristics of responders



TYPE OF DRUGS USED IN SDU AND CHEMSEX SETTINGS

Participants engaging in chemsex use additional drugs compared to non-chemsexers, such as GHB/GBL, Crystal Meth, Mephedrone, Ketamine, PHP and MDPV (Fig. 3)

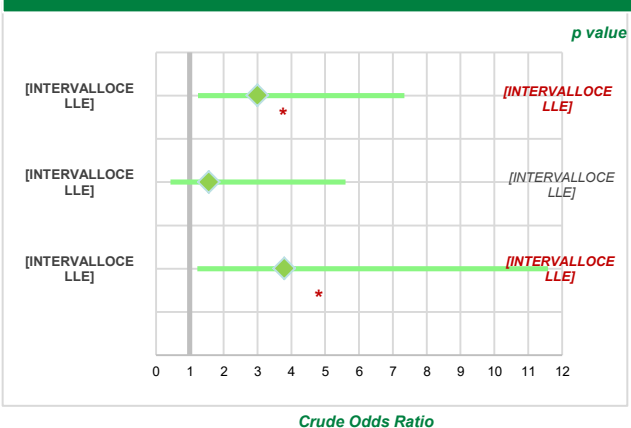
Figure 3. Most commonly sexualized drugs used



EMOTIONAL VULNERABILITY

- Depression, but not anxiety, seemed to play a significant role in distinguishing SDU non-chemsexers and chemsexers from non-users (Fig.4).
- Moreover, among PLWH, depression seemed to be associated with chemsex participation (AOR=1.65; 95%CI=0.98-2.78) (data not shown)

Figure 4. Association of Depression (PHQ-2) with SDU and chemsex



Conclusions

- A substantial proportion of MSM and PLWH engaged in SDU and Chemsex
- Measurable differences were observed in behaviors and psychological vulnerability between MSM users and non-users, particularly in terms of STI risk and depression
- It seems to be crucial to collect routinely more informations about chemsex behaviors and psychological vulnerability from MSM attendees STIs centers
- Healthcare professionals of STI centers should be properly informed about SDU and chemsex to improve prevention programs to reduce STI and HIV transmission among MSM