

P076: Chemsex drugs on the rise among MSM a longitudinal analysis of the Swiss HIV Cohort Study from 2007- 2017

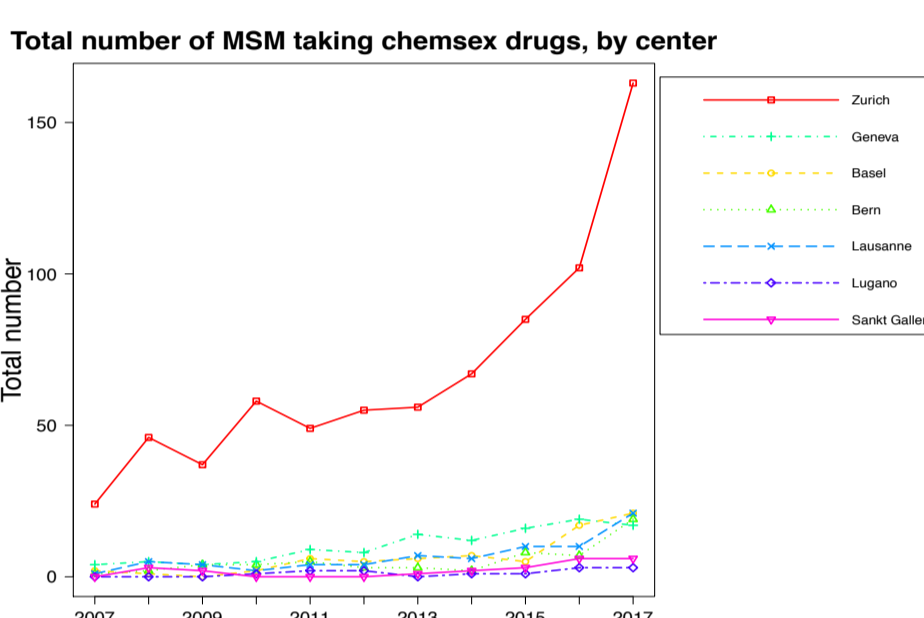
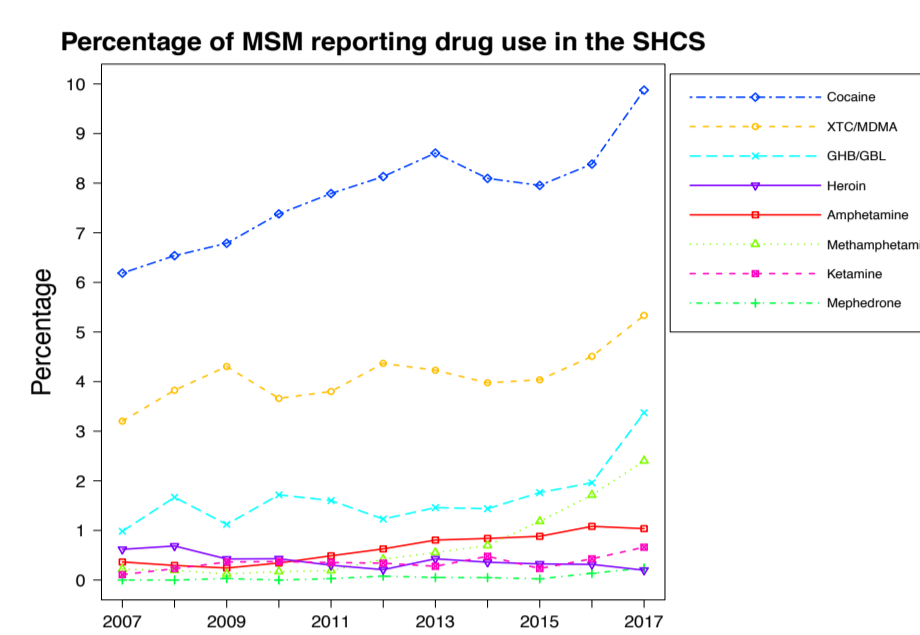
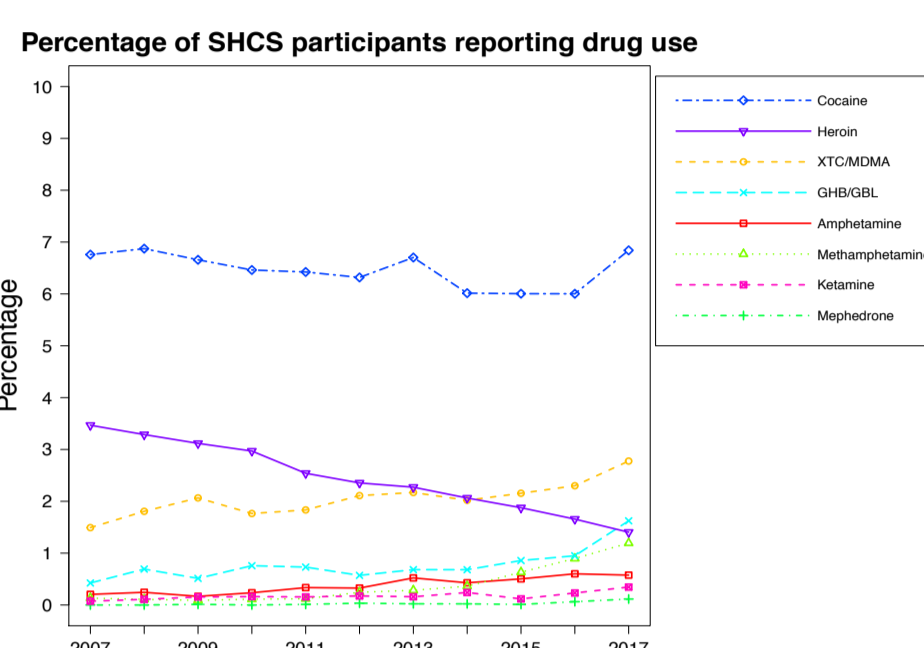
Benjamin Hampel^{1,2,†}, MD; **Katharina Kusejko**^{1,2,†}, PhD; **Roger D. Kouyos**^{1,2}, PhD; **Jürg Böni**², PhD; **Markus Flepp**³, MD; **Marcel Stöckle**⁴, MD; **Anna Conen**⁵, MD; **Charles Béguelin**⁶, MD; **Patrizia Kuenzler**⁷, M.Sc.; **Dunja Nicca**⁷, PhD; **Axel J. Schmidt**⁸, MD; **Huyen Nguyen**^{1,2}, MSc; **Julie Delaloye**⁹, MD; **Mathieu Rougemont**¹⁰, MD; **Enos Bernasconi**¹¹, MD; **Andri Rauch**⁶, MD; **Huldrych F. Günthard**¹, MD; **Dominique L. Braun**^{1,2}, †, MD; **Jan Fehr**^{1, 12,†}, MD; and the Swiss HIV Cohort Study
† these authors contributed equally to this work

¹ Division of Infectious Diseases and Hospital Epidemiology, University Hospital Zurich, University of Zurich, Zurich, Switzerland, ² Institute of Medical Virology, University of Zurich, Zurich, ³ Center of Infectious Diseases Zurich, Zurich, ⁴ Division of Infectious Diseases & Hospital Epidemiology, University Hospital Basel, University Basel, ⁵ Division of Infectious Diseases and Hospital Hygiene, Cantonal Hospital Aarau, Aarau, ⁶ Department of Infectious Diseases, Bern University Hospital, University of Bern, Bern, ⁷ Institute of Nursing Science, University of Basel, Basel, Switzerland, ⁸ Division of Infectious Diseases, Cantonal Hospital St. Gallen, St. Gallen, ⁹ Division of Infectious Diseases, University Hospital Lausanne, Lausanne, ¹⁰ Division of Infectious Diseases, University Hospital Geneva, Geneva, ¹¹ Division of Infectious Diseases, Regional Hospital Lugano, Lugano, ¹² Department of Public Health, Epidemiology, Biostatistics and Public Health Institute, University of Zurich, Zurich, Switzerland

Background: Chemsex refers to the use of sex-enhancing drugs among men who have sex with men (MSM) in combination with specific sexual and social behavior. Longitudinal data on this development and the associated health risks is scarce.

The Swiss HIV Cohort Study (SHCS): The SHCS launched in 1988, is a prospective cohort with ongoing enrollment of HIV-infected individuals in Switzerland. Of the approximately 20,000 participants in total, around 40% are MSM. It is estimated that about 84% of all HIV-positive MSM living in Switzerland participate in the SHCS. Since 2007, all SHCS participants are asked every six months by a health care professional about recreational drug use. Data on heroin, cocaine and cannabis use is collected in the form of binary variables. For other drugs, more detailed information is collected in two free-text fields.

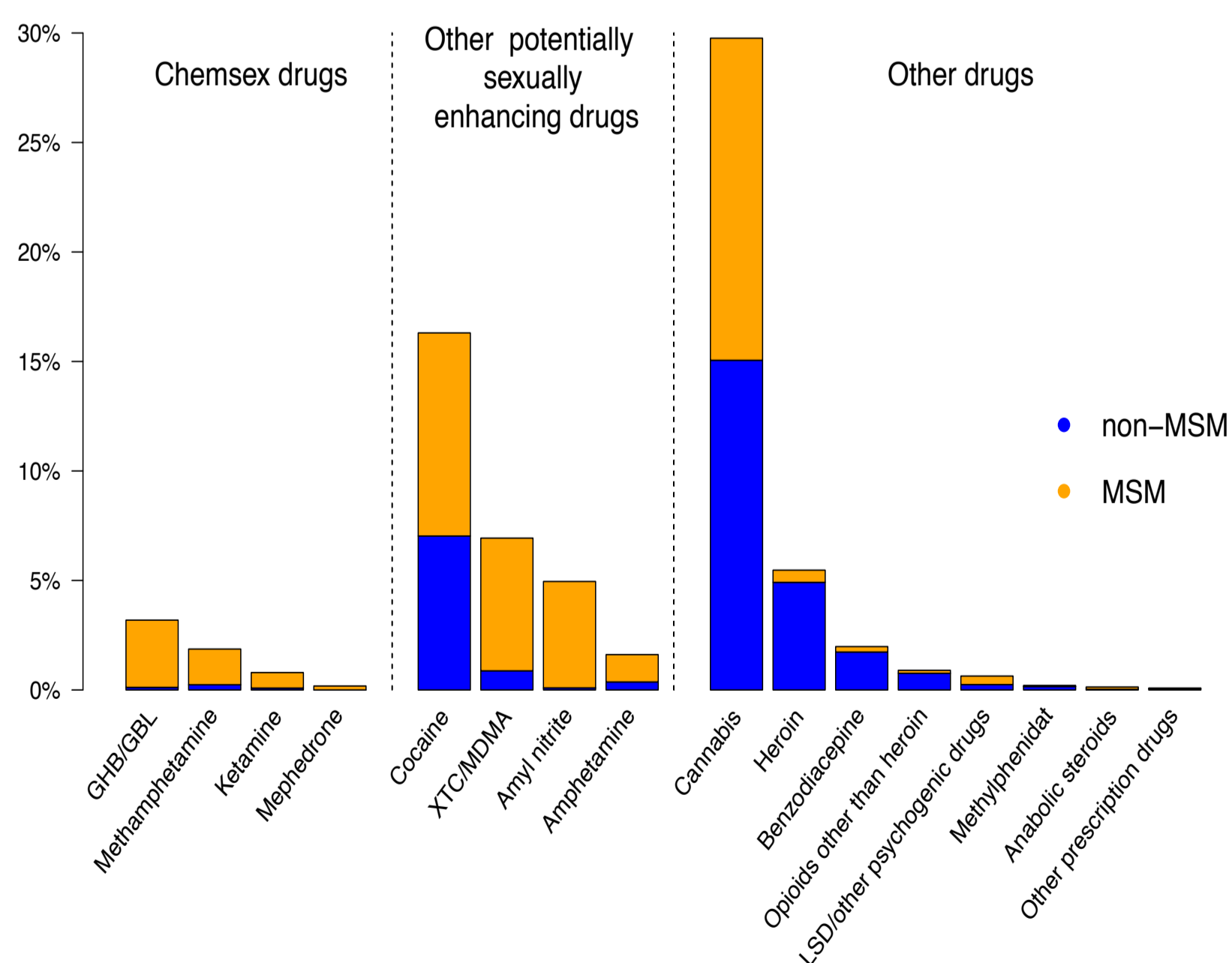
Methods: Data on all recreational drugs in SHCS from 2007-2017 reported from all seven centers participating in the SHCS was collected. Potential associations between patient characteristics and the consumption of methamphetamine, γ -hydroxybutyric acid/ γ -butyrolactone (GHB/GBL), 3,4-methylenedioxymethamphetamine (MDMA/XTC), cocaine and amphetamine were analyzed. We compared MSM who used methamphetamine, GHB/GBL, cocaine, XTC/MDMA or amphetamine, respectively, at least once during the whole follow-up time, with a control group. The control group consisted of MSM who either reported no recreational drug use at all follow-up visits in the year 2000-2017 or only the use of cannabis or amyl nitrite (“poppers”).



chemsex drugs defined here as: methamphetamine, GHB/GBL, cocaine, XTC/MDMA and amphetamine

Results During the study-period, information on recreational drug use was available for 12,443 SHCS participants, of which 5,614 (45.1%) belonged to the risk group of MSM. Information of 162,302 visits was available. Overall, we observed a stable percentage (9.0%) of recreational drug use (excluding cannabis, amyl nitrite and prescription drugs) among SHCS participants during the study period. For MSM, however, there was an increase in overall drug use of 8.8% in 2007 up to 12.4% in 2017, in particular for methamphetamine (0.2%-2.0 %) and GHB/GBL (1.0%-2.9 %). The use of each of the drugs methamphetamine, GHB/GBL, cocaine, XTC/MDMA and amphetamine was significantly associated with condomless sex, higher prevalence of depression, syphilis and HCV coinfection.

Cumulative drug use in the SHCS: 2007-2017



Factors associated with methamphetamine and GHB/GBL use

	Methamphetamine user	GHB/GBL user	Control-group
Total	176 (3.1%)	356 (6.3%)	4175 (74.3%)
Condomless-sex	155 (88.1%)	31 (89.3%)	1512 (36.3%)
	p<0.001 OR = 12.63	p<0.001 OR = 14.75	reference
Depression	95 (54.9%)	164 (46.7%)	1408 (34.5%)
	p<0.001 OR = 2.24	p<0.001 OR = 1.63	reference
Hepatitis-C	43 (25.6%)	47 (13.6%)	248 (6.0%)
	p<0.001 OR = 5.3	p<0.001 OR = 2.42	reference
Syphilis	89 (50.9%)	149 (42.2%)	840 (20.4%)
	p<0.001 OR = 4.0	p<0.001 OR = 2.84	reference

P= p-value; OR= odds ratio; control-group: no recreational drug use, or only use of cannabis or amyl nitrite during the study period

Conclusions: The increase in the use of chemsex drugs among MSM living with HIV in Switzerland and the strong association with coinfections and depression calls for action: We need harm reduction programs tailored for MSM as well as training for health care professionals on how to address this topic.



University Hospital
Zurich



University of
Zurich^{UZH}

