

Chemsex, HIV testing and associated factors in gay, bisexual and other men who have sex with men and transgender people, among European community-based centres

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Chemsex:

- Use of drugs with the purpose of engaging in sexual relationships
 - Enhancing and prolonging sexual experience
 - Frequently used drugs: Mephedrone, Methamphetamine, GHB/GBL

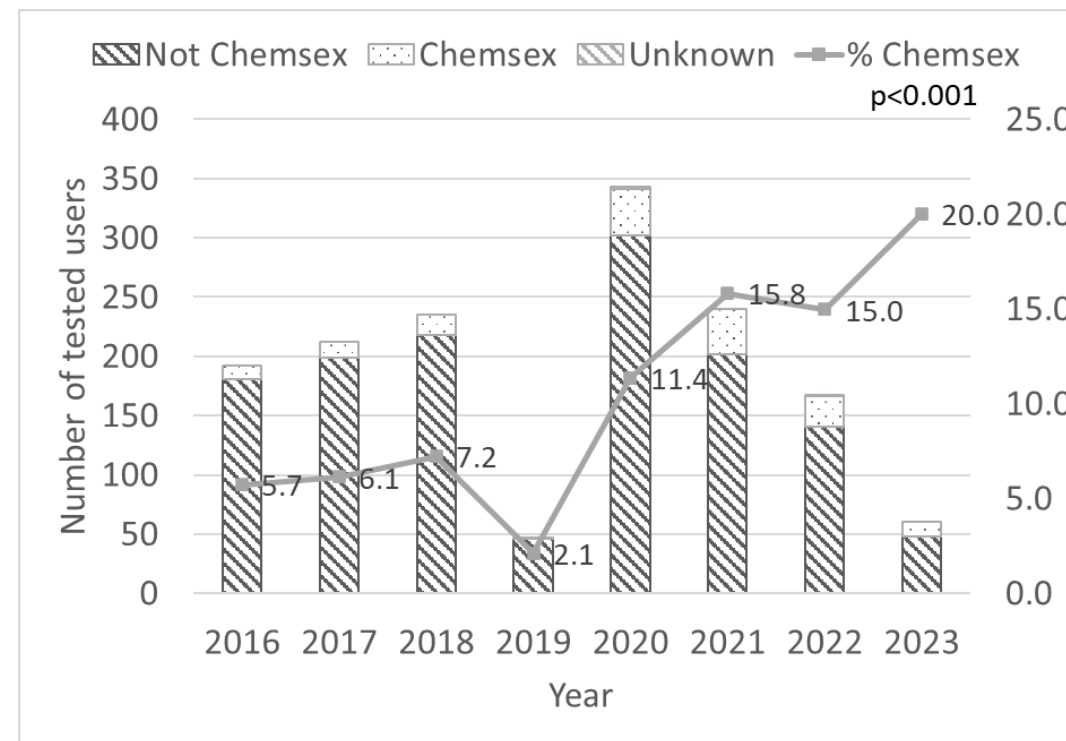
Chemsex:

- Highly prevalent among GBMSM and transgender individuals
- Associated with HCV, syphilis, gonorrhoea
- Associated with practices related to HIV acquisition
- Associated with mental health problems

Tomkins, A., George, R., & Kliner, M. (2019). Sexualised drug taking among men who have sex with men: a systematic review. *Perspectives in Public Health*, 139(1), 23–33.

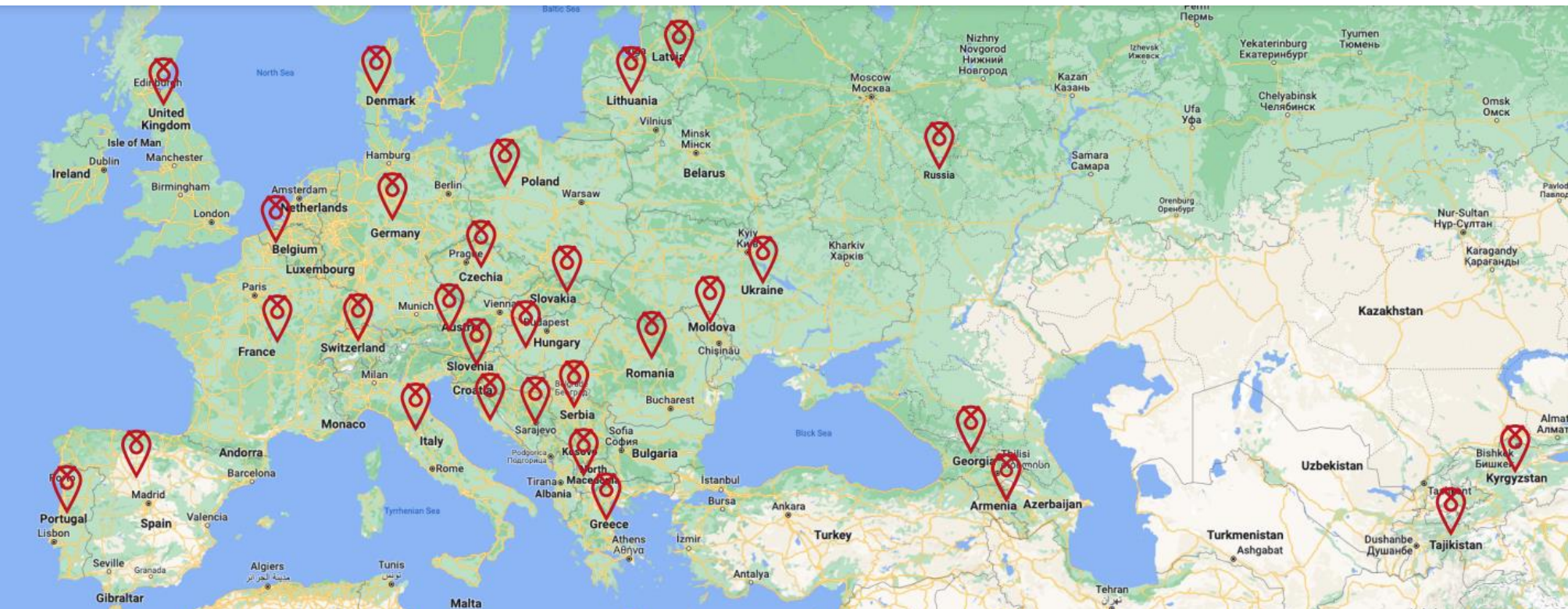
Alarcón-Gutiérrez, M., Palma Díaz, D., Forns, M.L., Fernández-López, L., García De Olalla, P. & Rius Gibert, C. (2023). Trends in sexual health of gay, bisexual, and other men who have sex with men, and transgender individuals: An apps-driven testing program for HIV and other STIs in Barcelona, Spain (2016-2023). *Journal of Community Health* (accepted manuscript).

Figure 1: Annual trends of chemsex practice in a rapid testing program through dating apps for GBMSM in Barcelona, Spain. 2016-2023



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The **COBATEST Network** connects organizations across Europe and Central Asia that provide community-based voluntary counselling and STI/HIV testing (CBVCT) services.



Coordinated by:



Centre d'Estudis Epidemiològics
sobre les Infeccions de Transmissió
Sexual i Sida de Catalunya

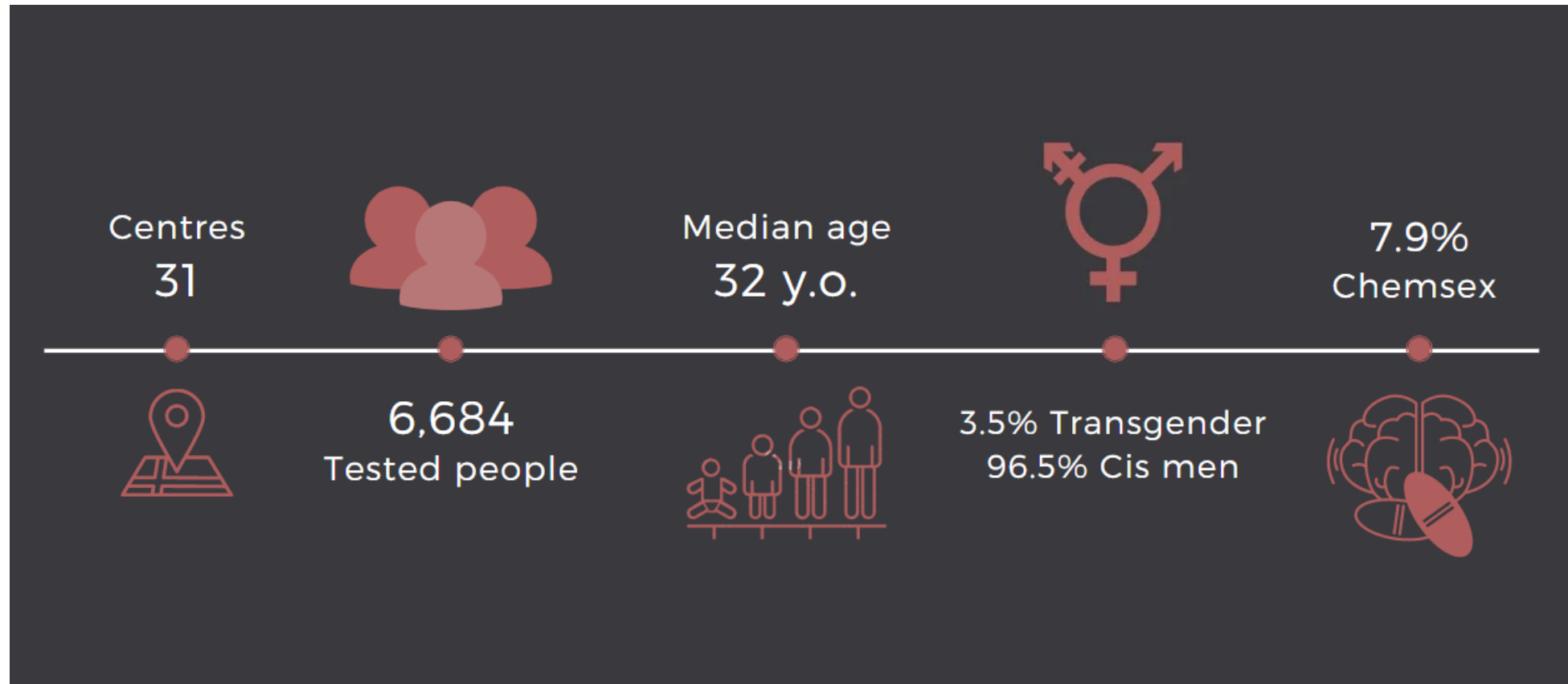
The network comprises 111 CBVCT members from 29 European and 2 Central Asian countries.

Objective

- To determine associated factors with chemsex practice among GBMSM and transgender population who attended community-based voluntary counselling and HIV/STI testing (CBVCT) centres in Europe

Study	Cross-sectional
Ambit	31 COBATEST network centres
Study period	2019-2022
Population	Transgender and GBMSM users
Dependent variables	Chemsex practices
Analysis	Prevalence proportion Bivariate and multivariate logistic regression (aOR + CI95%) Totals and stratified by gender

RESULTS



RESULTS

Table 1: Associated factors to chemsex practice among GBMSM and transgender users of 31 community-based centres from the COBATEST Network. Multivariate logistic regression.

		Total sample (n=6,684)		
		aOR	CI95%	p-value
Age		1.00	(0.99 - 1.01)	0.656
Gender				
	Male	1.90	(1.12 - 3.22)	0.017
	Gender identity minorities	1 (reference)		
Migration situation				
	Yes	1.43	(1.14 - 1.80)	0.002
	No	1 (reference)		
Sexual work				
	Yes	4.99	(3.55 - 7.01)	<0.001
	No	1 (reference)		
Intravenous drugs use				
	Yes	13.02	(5.86 - 28.95)	<0.001
	No	1 (reference)		
Risk exposition for testing				
	Yes			
	No			
Ever tested for HIV				
	Yes	1.71	(1.19 - 2.45)	0.004
	No	1 (reference)		
Condom use last sexual intercourse				
	Yes	1 (reference)		
	No	2.37	(1.92 - 2.93)	<0.001
Previous STI during last 12 months				
	Yes	1.86	(1.43 - 2.42)	<0.001
	No	1 (reference)		
Actual HIV test				
	Positive	2.28	(1.25 - 4.18)	0.008
	Negative	1 (reference)		

aOR= adjusted odds ratio

CI95%= confidence interval for 95%

RESULTS

Table 2: Associated factors to chemsex practice among GBMSM and transgender users of 31 community-based centres from the COBATEST Network. Stratified multivariate logistic regression.

		GBMSM (N=6,450)			Transgender (n=234)		
		aOR	CI95%	p-value	aOR	CI95%	p-value
Age		1.00	(0.99 - 1.01)	0.367	0.97	(0.93 - 1.01)	0.182
Gender							
	Male						
	Gender identity minorities						
Migration situation							
	Yes	1.51	(1.20 - 1.90)	<0.001	1.74	(0.62 - 4.86)	0.290
	No	1 (reference)			1 (reference)		
Sexual work							
	Yes	5.85	(4.15 - 8.25)	<0.001			
	No	1 (reference)					
Intravenous drugs use							
	Yes	14.31	(6.24 - 32.81)	<0.001			
	No	1 (reference)					
Risk exposition for testing							
	Yes				1.92	(0.76 - 4.89)	0.169
	No				1 (reference)		
Ever tested for HIV							
	Yes	1.80	(1.23 - 2.63)	0.002			
	No	1 (reference)					
Condom use last sexual intercourse							
	Yes	1 (reference)			1 (reference)		
	No	2.31	(1.86 - 2.87)	<0.001	2.47	(1.06 - 5.74)	0.036
Previous STI during last 12 months							
	Yes	1.89	(1.44 - 2.48)	<0.001			
	No	1 (reference)					
Actual HIV test							
	Positive	1.86	(0.91 - 3.81)	0.087	3.68	(1.03 - 13.21)	0.046
	Negative	1 (reference)			1 (reference)		

aOR= adjusted odds ratio

CI95%= confidence interval for 95%

CONCLUSIONS

- Chemsex is a prevalent practice among GBMSM and transgender people
 - Different pattern between GBMSM and TG
 - TG with lack of other associated variables (stigma, violence, structural barriers)
- Associated with HIV positive testing

CONCLUSIONS

- Vulnerable subpopulations identified:
 - Cis-GBMSM
 - Migrants
 - Sex work
 - People who inject drugs
- Specific opportunities identified :
 - Counselling during HIV/STI testing
 - Follow-up of STIs

Thank you!

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