

SUBSTANCE USE AMONG PORTUGUESE MEN WHO HAVE SEX WITH MEN:

results from the EMIS survey

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Background

Substance use and sexual practices have been the subject of continued interest namely concerning their interaction and the resulting effect on communicable diseases. Also, substance use and homosexuality are often associated with discrimination and stigmatization posing additional challenges both to the individuals and to effective health promotion strategies.

Methods

The European MSM Internet Survey-EMIS, the largest international study ever conducted on homosexually active men, took place in 2010, from June 4th to August 31st.

An anonymous questionnaire was provided online in 38 European countries and 25 languages.

Data from the Portuguese sample was extracted and analyzed (SPSS 19). A total of 5391 subjects living in Portugal provided information but for analysis only cases with non-discrepant data were included resulting in **4584 participants**. Information on sexual behavior, HIV infection and substance use was collected.



Description of study participants

Born in Portugal: 82% (3678)

Living in medium size or larger cities: 65% (2910)

Age (mean± SD): 32 ± 10.6 years

Employed: 69% (3110)

Students: 20% (917)

High educational degree: 58% (2606)

Self described as gay/homosexual: 70% (3186)

Attracted only or mostly to men: 89% (4086)

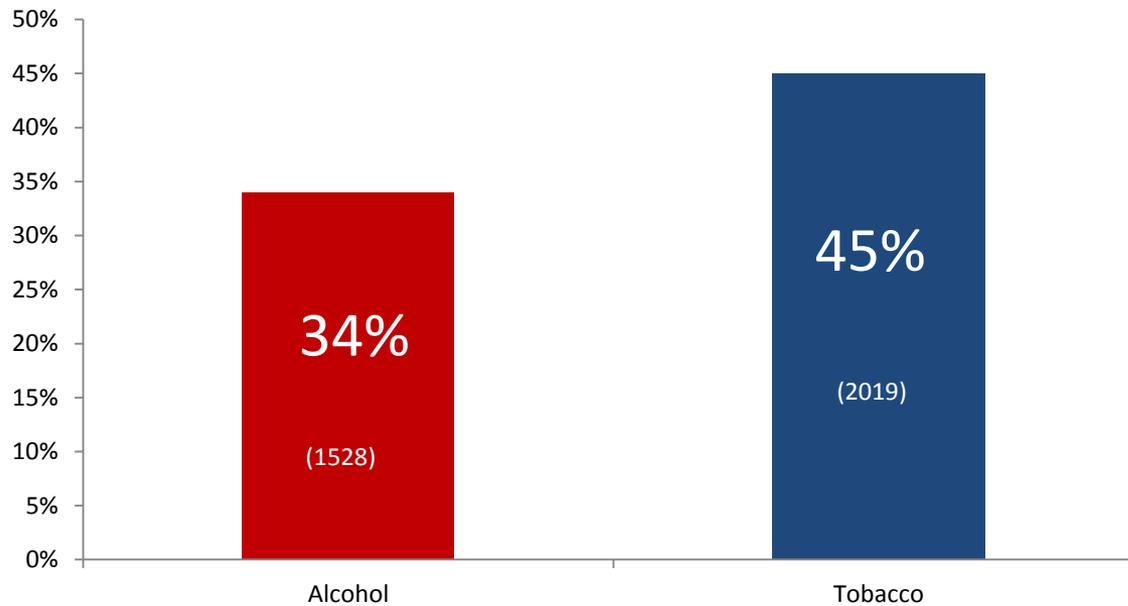
“Out of the closet”: 53% (2416)

HIV prevalence (among those tested): 11% (350)

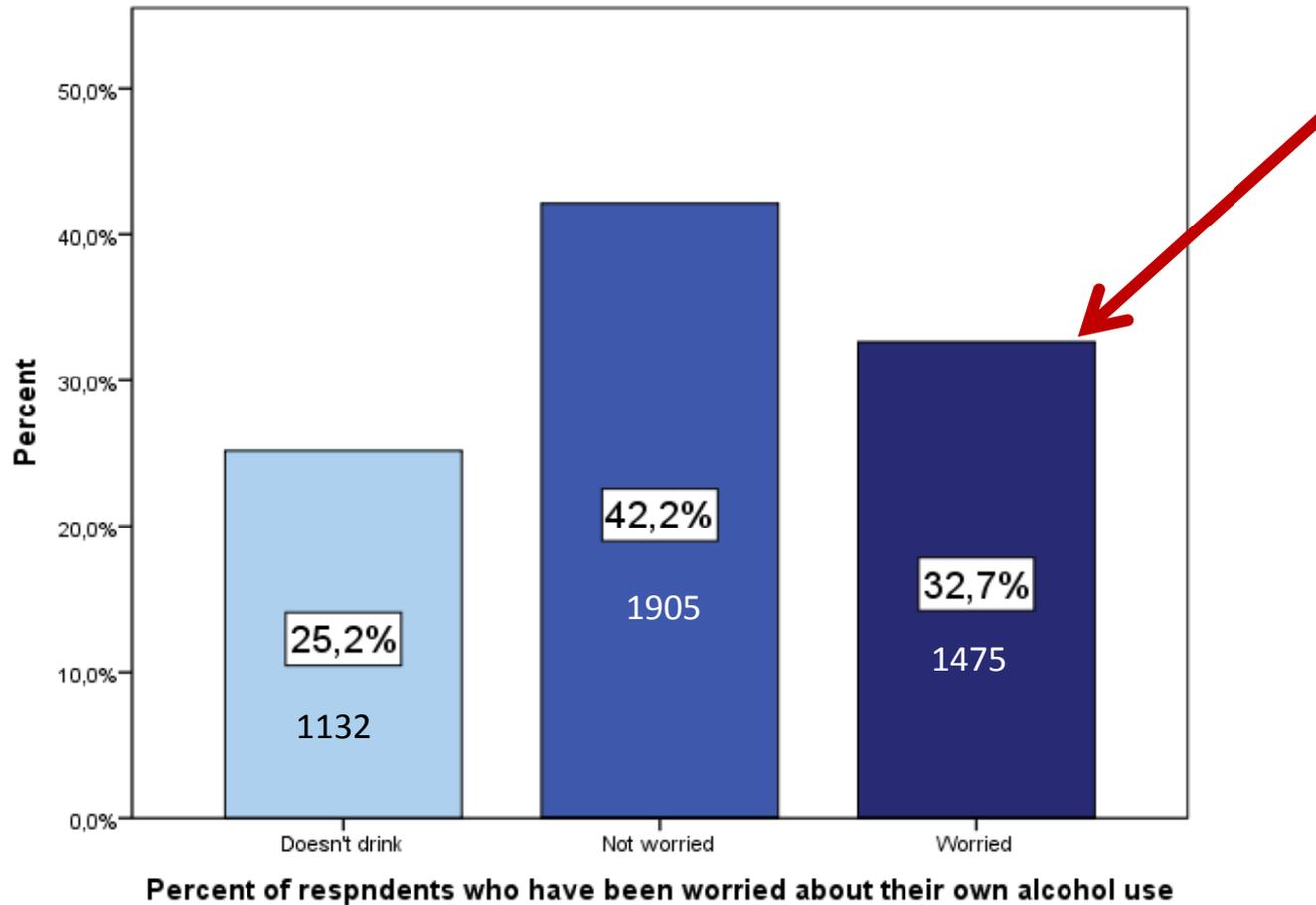
Results

Substance use: alcohol and tobacco

Proportion of participants reporting alcohol or tobacco consumption within the last 24h



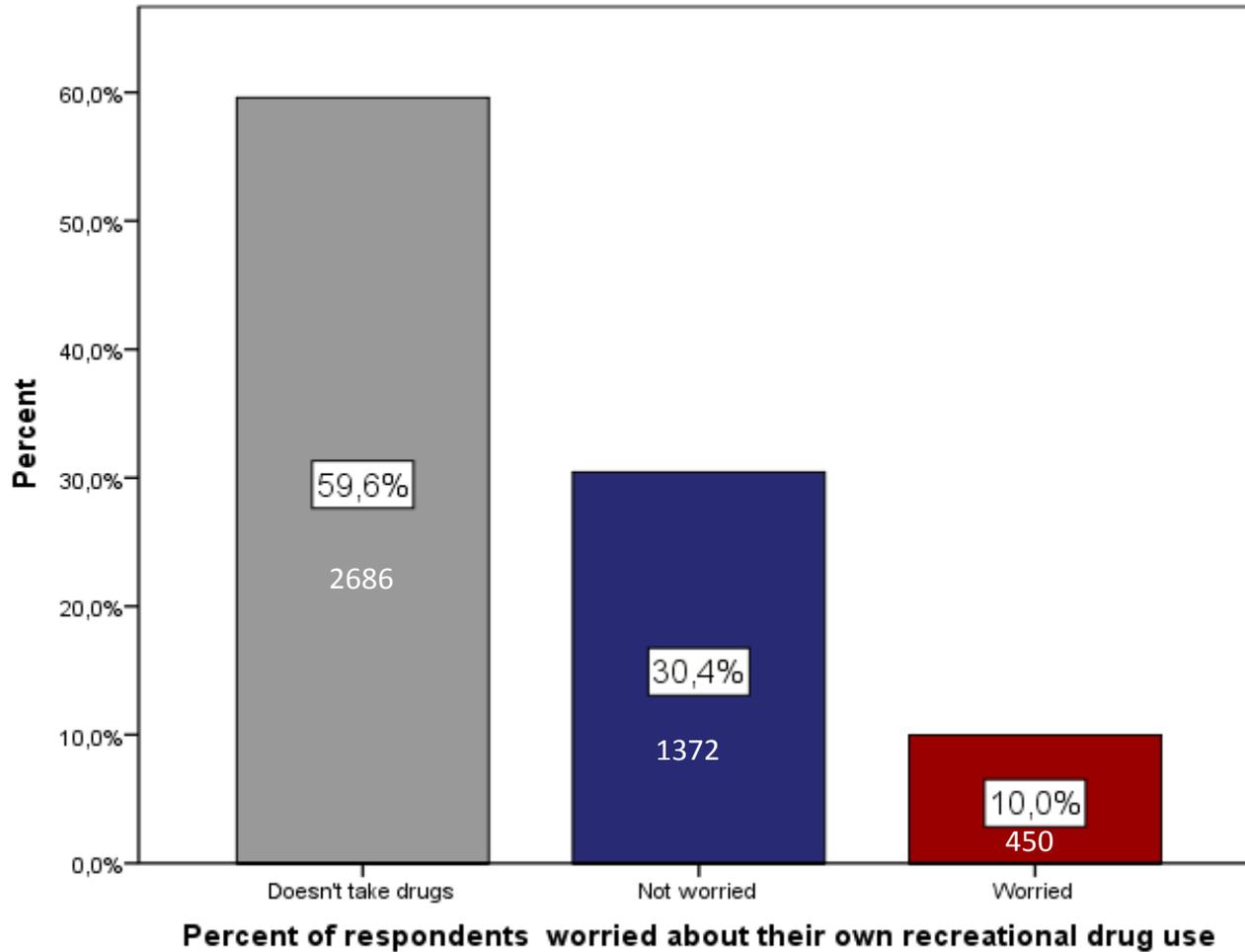
Alcohol



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The Future of European Prevention among MSM



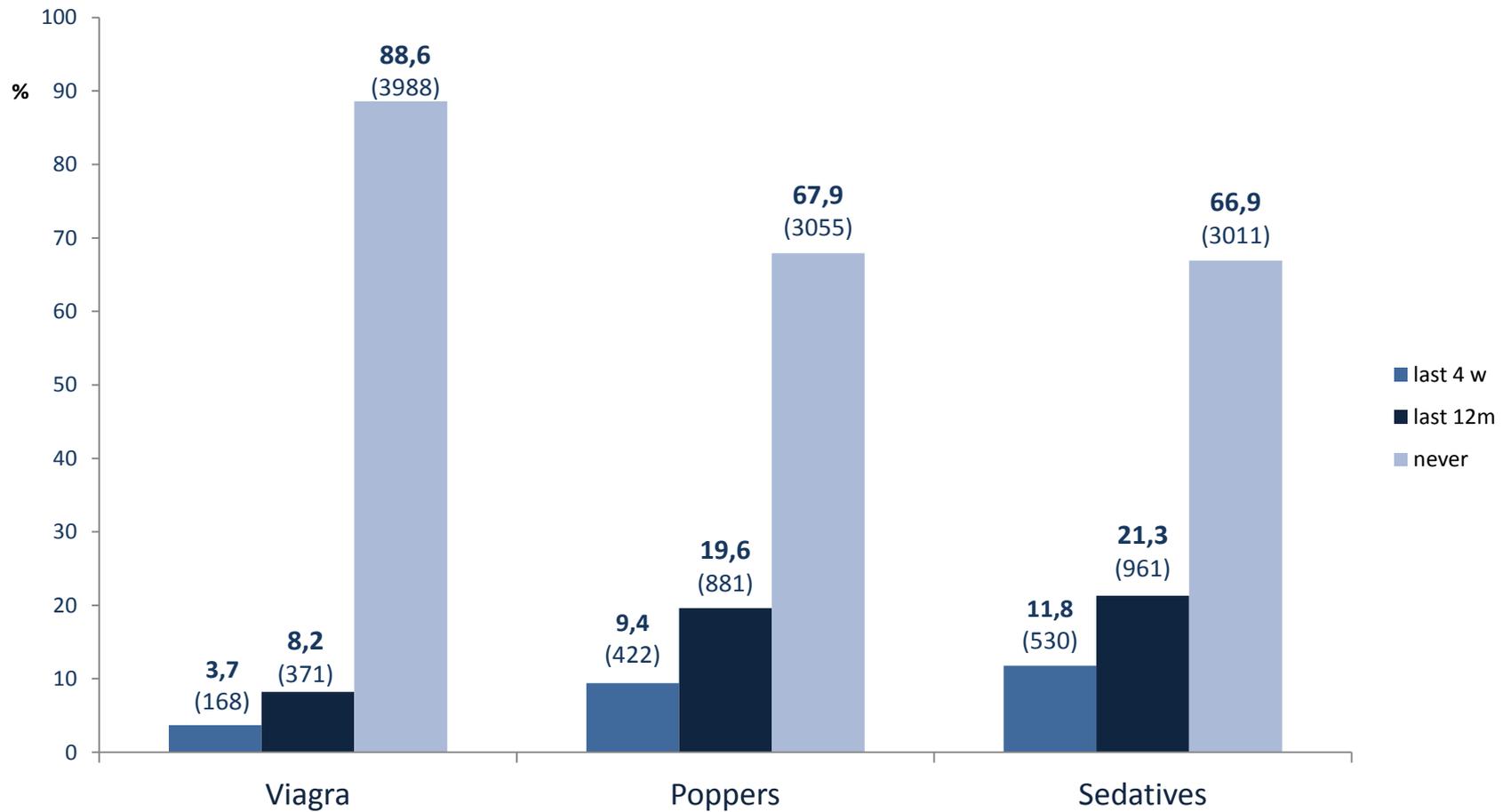
Injection of anabolic steroids

2.3% (107) reported use at least once

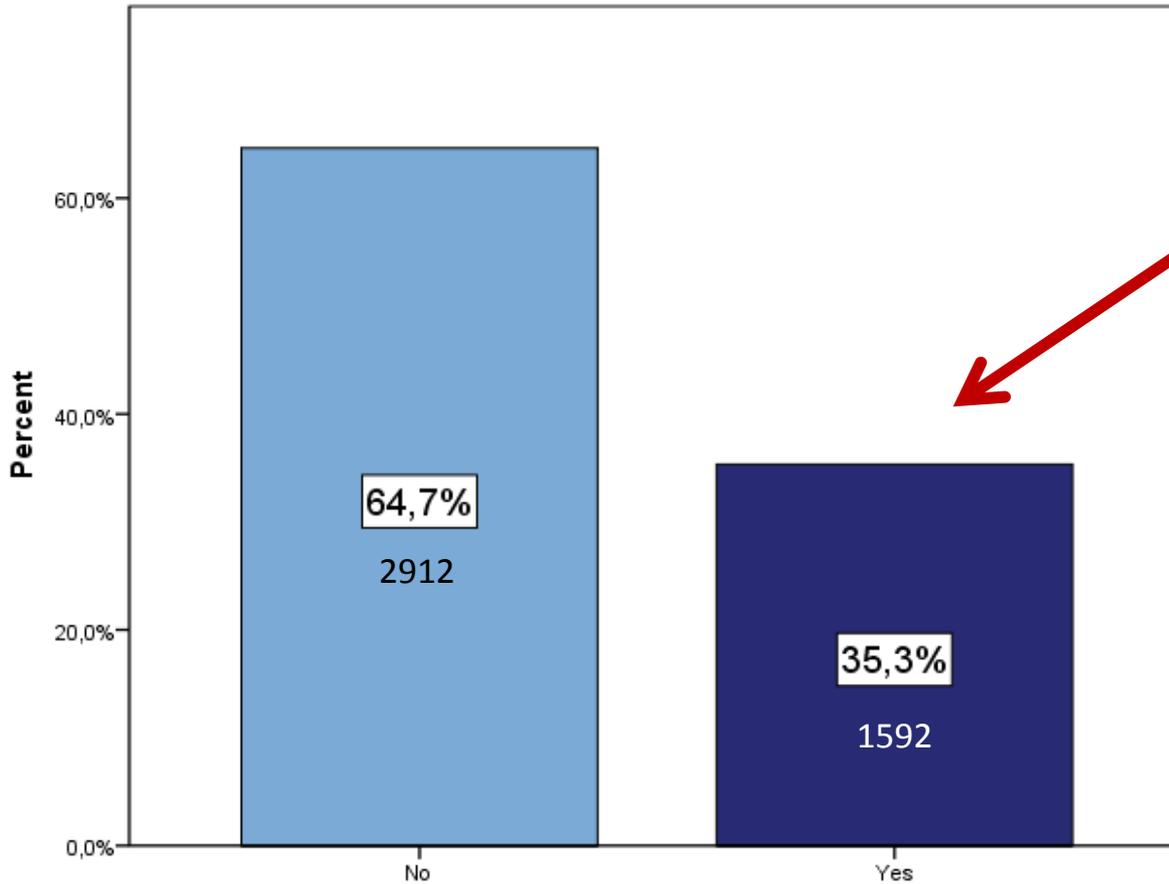
Injection of drugs (anabolic steroids excluded)

2.6% (114) reported use at least once

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Have you EVER taken any other recreational or illicit drugs?

35% reported use of substances **other than** sedatives, “viagra-like” or “poppers”, at least once

History of using heroin/crack

0.8 % (35) reported use within last 12m

0.9% (41) reported use within 1-5 years ago

2.0% (88) reported use more than 5 years ago

96.4 % (4340) had never consumed/ didn't answer

Cannabis

12,6% (567) reported use within last 4 weeks

22,2% (999) reported use within last 12 months

67,4% (3034) had never consumed

“Party drugs”: typically associated with sex and parties*

Cocaine

ketamine (special K)

Ecstasy (E,XTC,MDDA)

GHB/GLB (liquid ecstasy)

Amphetamine (speed)

Crystal methamphetamine (crystal, meth,Tina)

Mephedrone (bubbles,meow,4-MMC, methylone)

Use of party drugs:

within last 4weeks: 5% (214)

Within 12months: 11% (478)

* Aggregation based on factor analysis and by adopted by EMIS group- synthase of drugs and alcohol : Martina Furegato, Enrica Castellani, Michele Breveglieri Axel J. Schmidt

Use of “party drugs”

Substance use	Within 4 w n (%)	Within 12 m n (%)
Cocaine	155 (9.8)	238 (25.0)
Including non responders (3009)	(3.4)	(8.6)
ketamine	17 (1.1)	56 (3.6)
Including non responders (3011)	(0.3)	(1.1)
Ecstasy	79 (5.0)	231 (14.7)
Including non responders (3013)	(1.7)	(5.0)
GHB/GLB	24 (1.5)	82 (5.2)
Including non responders (3011)	(0.5)	(1.7)
Amphetamine	33 (2.1)	123 (7.8)
Including non responders (3013)	(0.7)	(2.6)
Crystal methamph.	9 (0.6)	45 (2.8)
Including non responders (2997)	(0.2)	(1.0)
Mephedrone	10 (0.6)	22 (1.4)
Including non responders (3009)	(0.2)	(0.5)

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**Does the use of “Party drugs” increase the risk
of HIV transmission?**

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Party drugs in last 12 m	UAI in last 12m		OR [IC95%]
	yes	no	
no	2252 (65.8%)	1172 (34.2%)	1
yes	417 (77.8%)	119 (22.2%)	1.690 [1.343-2.127]

Party drugs in last 12 m	Perceived risk of transmission in last 12m		OR [IC95%]
	yes	no	
no	1048(28.8%)	2591(71.2%)	1
yes	195 (42.4%)	265(57.6%)	1.819 [1.492-2.218]

* UAI (unprotected anal intercourse) with any male partner of unknown or discordant status

**And which are the determinants
of “party drug” use?**

	Party drugs on last 12m	Party drugs on last 12m	
	YES	NO	OR [IC95%]
Educational level*			
Low/medium	180 (9.5)	1714 (90.5)	1
High	298 (11.5)	2294 (88.5)	1.237 [1.018-1.504]
Age			
<20	15 (4.1)	351(95.9)	1
20-24	96 (10.7)	803 (89.3)	2.798 [1.600-4.890]
25-29	124 (14.5)	733 (85.5)	3.959 [2.282-6.866]
30-34	87 (11.9)	644 (88.1)	3.161 [1.800-5.552]
35-39	65 (11.3)	511 (88.7)	2.977 [1.670-5.304]
40-44	45 (10.5)	385 (89.5)	2.735 [1.498-4.994]
45-49	34 (10.7)	285 (89.3)	2.792 [1.491-5.227]
50-54	9 (5.1)	167 (94.9)	1.261 [0.541-2.941]
55-59	1 (1.4)	72 (98.6)	0.325 [0.042-2.500]
60-64	2 (3.8)	50 (96.2)	0.936 [0.208-4.215]
>65	0	25 (100)	...

	Party drugs on last 12m	Party drugs on last 12m	
	YES	NO	OR [IC95%]
Identity			
Gay	374 (11.9)	2763 (88.1)	1
Bisexual/other	104 (7.7)	1248 (92.3)	0.616 [0.490-0.773]
“closet”			
Out of the closet	383 (16.1)	1999 (83.9)	1
In the closet	95 (4.5)	2003(95.5)	0.248 [0.196-0.313]
Current steady man partner			
yes	172 (10.3)	1495(89.7)	1
No	304 (10.7)	2525 (88.3)	1.046[0.859- 1.275]
Nr non steady partners last 12m			
0	101 (6.6)	1436 (93.4)	1
1-9	192(9.7)	1786 (90.3)	1.528 [1.189-1.964]
>10	178 (19.3)	746 (80.7)	3.392 [2.617-4.398]
Sex abroad			
no	126 (5.5)	2162(94.5)	1
Yes >12m	153 (13.6)	973 (86.4)	2.698 [2.106-3.456]
Yes <12m	192 (20.9)	728 (79.1)	4.525[3.560-5.752]

	Party drugs on last 12m YES	Party drugs on last 12m NO	OR [IC95%]
Gay social commercial venue visits*			
Never/>12m	49 (3.5)	1351 (96.5)	1
Yes <12m	427 (13.8)	2667 (86.2)	4.414 [3.261-5.975]
Sex focused venue visits** (same country of residence)			
Never/>12m	162 (7.2)	2103 (92.8)	1
Yes <12m	314 (14.1)	1913 (85.9)	2.131 [1.745-2.601]
Being paid for sex			
No	418 (10.4)	3583 (89.6)	1
Yes	41 (26.5)	114 (73.5)	3.083[2.127- 4.468]
Serostatus			
HIV negative or untested	412 (10.0)	3718 (90.0)	1
HIV +	61 (17.7)	283(82.3)	1.945 [1.449-2.612]

* gay pub, bar, disco, nightclub

** gay sauna, gay sex party, porn cinema, cruising location as street, park, beach, baths,lavatory

	Party drugs on last 12m YES	Party drugs on last 12m NO	OR [IC95%]
Knowledge about HIV transmission (UNGASS 14)			
0-4 correct	257 (10.2)	2267 (89.8)	1
5 or more	221 (11.2)	1755 (88.8)	1.111 [0.918-1.344]
Alcohol			
Doesn't drink	17 (1.5)	1104 (98.5)	1
Not worried about consumption	294 (15.5)	1604 (84.5)	11.093 [7.257-19.525]
Worried about consumption	165 (11.2)	1304 (88.8)	8.217[4.956-13.625]

	Party drugs on last 12m	Party drugs on last 12m	OR [IC95%]	OR a* [IC95%]
	YES	NO		
Identity				
Gay	374 (11.9)	2763 (88.1)	1	
Bisexual/other	104 (7.7)	1248 (92.3)	0.616 [0.490-0.773]	0.792[0.600-1.047]
“closet”				
Out of the closet	383 (16.1)	1999 (83.9)	1	
In the closet	95 (4.5)	2003(95.5)	0.248 [0.196-0.313]	0.347 [0.263-0.458]
Nr non steady partners last 12m				
0	101 (6.6)	1436 (93.4)	1	
1-9	192(9.7)	1786 (90.3)	1.528 [1.189-1.964]	1.502[1.159-1.947]
>10	178 (19.3)	746 (80.7)	3.392 [2.617-4.398]	1.722[1.235-2.401]
Sex abroad				
no	126 (5.5)	2162(94.5)	1	
Yes >12m	153 (13.6)	973 (86.4)	2.698 [2.106-3.456]	1.280[0.987-1.662]
Yes <12m	192 (20.9)	728 (79.1)	4.525[3.560-5.752]	2.903[2.172-3.879]

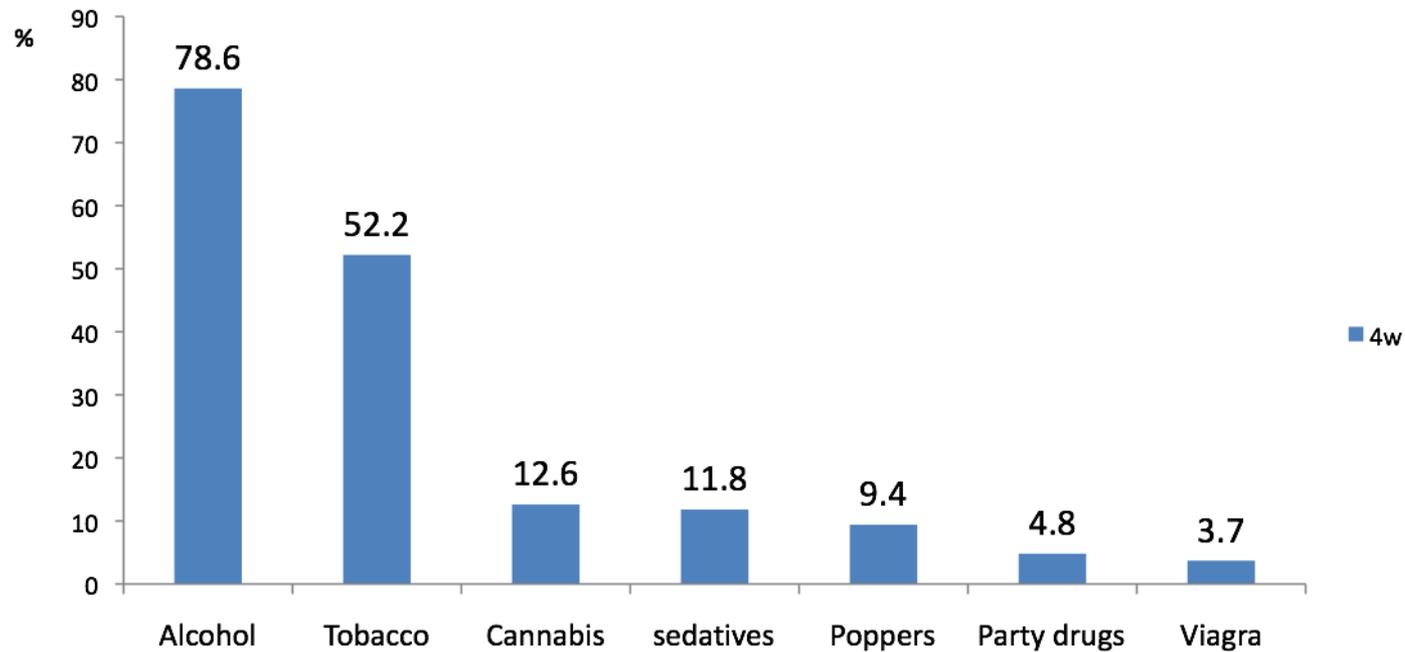
* Adjusted for age, serostatus, number of non steady partners, sex abroad, gay social commercial venues visits, sex focused venues visits, paid sex, “closet” and alcohol

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	YES	NO		
Gay social commercial venue visits				
Never/>12m	49 (3.5)	1351 (96.5)	1	
Yes <12m	427 (13.8)	2667 (86.2)	4.414 [3.261-5.975]	1.838[1.285-2.629]
Sex focused venue visits (same country of residence)				
Never/>12m	162 (7.2)	2103 (92.8)	1	
Yes <12m	314 (14.1)	1913 (85.9)	2.131 [1.745-2.601]	1.365[1.064-1.750]
Being paid for sex				
No	418 (10.4)	3583 (89.6)	1	
Yes	41 (26.5)	114 (73.5)	3.083[2.127- 4.468]	1.864[1.197-2.904]
Serostatus				
HIV negative or untested	412 (10.0)	3718 (90.0)	1	
HIV +	61 (17.7)	283(82.3)	1.945 [1.449-2.612]	1.410[1.003-1.981]

* Adjusted for age, serostatus, number of non steady partners, sex abroad, gay social commercial venues visits, sex focused venues visits, paid sex, “closet” and alcohol

Conclusions

More commonly used substances among reported by EMIS Portuguese population in the 4w before the questionnaire, 2010 (n= 4584)



Conclusions

Alcohol is perceived as a problem by 33% of the participants.

Alcohol and party drugs use are strongly associated.

Party drugs use are significantly associated with unprotected anal intercourse and to a higher risk perception of HIV transmission.

Use of party drugs:

within last 4w: **5%** (214)

Within 12m: **11%** (478)

Conclusions

Factors significantly associated with party drug use:

- Visiting gay social commercial venues (gay pub, bar, disco, nightclub),
- Visiting sex focused venues (gay sauna, gay sex party, porn cinema, cruising location as street, park, beach, baths,lavatory)
- Having sex abroad
- Being paid for sex
- Sex with non steady partners
- Being HIV positive (?)

Conclusions

Knowledge about HIV transmission is not sufficient for the adoption of safer behaviors.

Efforts to develop and to implement prevention strategies highlighting the party drugs issue are needed.

Major limitations

Self-selection bias; the sample may not be representative of MSM Portuguese population.

Recall bias.

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