TUPE492

Differences in association between HIV testing and risk taking among men having sex with men (MSM) across Europe – Results of the European MSM Internet Survey [EMIS]

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Background

Early diagnosis of HIV - if resulting in effective antiretroviral treatment – can decrease infectiousness and prevent disease progression. Appropriate counseling in the context of HIV testing has the potential to decrease risk taking and increase protective behavior. However, potential benefits of HIV testing would be smaller if testing is not correlated with risk taking.

Methods

The European MSM Internet Survey (EMIS) mobilized 174,209 respondents from 38 European countries to complete an online questionnaire which included HIV-testing, sexual risk-taking, and gay-related discrimination. Based on national datasets comprising >1,000 respondents (n=25), we correlated risk taking and recent HIV testing (< 12 months).

Risk-taking was defined as reporting unprotected anal intercourse with a partner of unknown or discordant (=non-concordant) HIV-serostatus in the past 12 months (ncUAI). Individual determinants of recent testing were evaluated in multivariable regression analyses.

Results

We found large differences across Europe regarding self-reported behaviors that constitute an HIV transmission risk (ncUAI) (see Fig.1).

We found large differences in HIV testing rates across Europe (see Fig.2).

In all European sub-regions (see colored map) MSM reporting ncUAI in the previous 12 months were less likely to test for HIV in the previous 12 months than men not reporting ncUAI.

Countries/ sub-regions differed considerably in the association between HIV transmission risks and uptake of testing: Comparing MSM reporting no ncUAI with men reporting ncUAI, the odds for testing in the last 12 months ranged from 0.87 in Northwest Europe to 0.42 in Central-East Europe (see Tab. 1)

At an individual level, age, number of sexual partners in the previous 12 months, perceived availability of free/affordable HIV-testing, and being out about being attracted to men were factors strongly and positively associated with testing (see Tab.2).

Table 1: Odds for HIV-testing in the last 12 months according to risk behavior by European region

	no ncUAI	ncUAI	OR	95%-CI
Northwest	33.4%	30.4%	0.87	0.79-0.97
West	43.9%	38.6%	0.80	0.76-0.84
Central-West	39.1%	29.1%	0.64	0.61-0.67
Southwest	47.2%	36.2%	0.63	0.60-0.67
Southeast (non-EU)	35.7%	21.6%	0.50	0.2-0.59
East	48.8%	31.2%	0.48	0.43-0.53
Southeast (EU)	43.7%	26.0%	0.45	0.39-0.53
Northeast	34.6%	18.5%	0.43	0.34-0.55
Central-East	39.8%	21.7%	0.42	0.38-0.47

Table 2: Factors associated with recent HIV testing on an individual level: multivariable regression, controlling for country of residence

		%	p	adj. OR	Lower	Upper
Age	25-39	48.9	Ref.	1		
	<25	23.3	<0.001	0.93	0.90	0.95
	40+	27.8	<0.001	0.71	0.69	0.73
City size	>500,000	45.6	<0.001	1.18	1.16	1.21
New steady partner		11.8	<0.001	1.73	1.67	1.79
# Sex partners in the last 12 months	None	8.8	Ref.	1		
	1	19.0	0.285	1.04	0.97	1.11
	2-5	30.1	<0.001	1.40	1.31	1.50
	6-10	16.0	<0.001	1.89	1.76	2.02
	>10	26.0	<0.001	2.50	2.34	2.67
Being 'out' to most or all significant others		57.6	<0.001	1.42	1.38	1.46
Non-gay identity		23.8	<0.001	0.82	0.79	0.85
Free/affordable HIV-testing		88.1	<0.001	2.49	2.37	2.60
UAI	None	64.7	Ref.	1		
with non-steady partners perceived as concordant		6.7	<0.001	1.45	1.38	1.52
with any partner of unknown or discordant status		28.7	<0.001	0.55	0.54	0.57
Knowing that „HIV infection can be controlled with medicines, so that its impact on health is much less."		91.9	0.003	1.07	1.02	1.12

Conclusions

Considerable differences in the association between risk-reporting and HIV-testing were observed among MSM in Europe.

Besides age, test accessibility and number of sexual partners, the ability to live openly as a gay man are important determinants for targeted and effective implementation of HIV test promotion. High levels of homophobia may deter MSM with increased risk of HIV infection from taking HIV tests, and thus render HIV test promotion less effective.

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EMIS European sub-regions

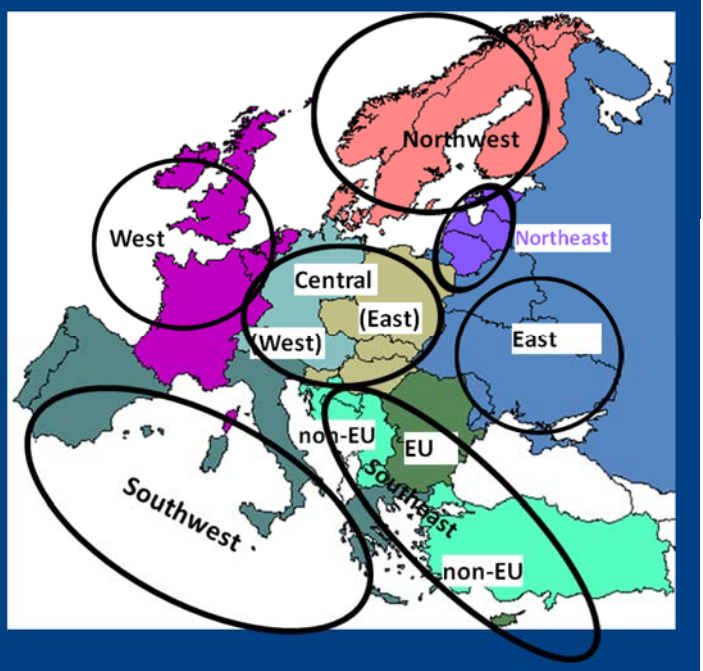


Fig.1: Self-reported non-concordant UAI (last 12 months)

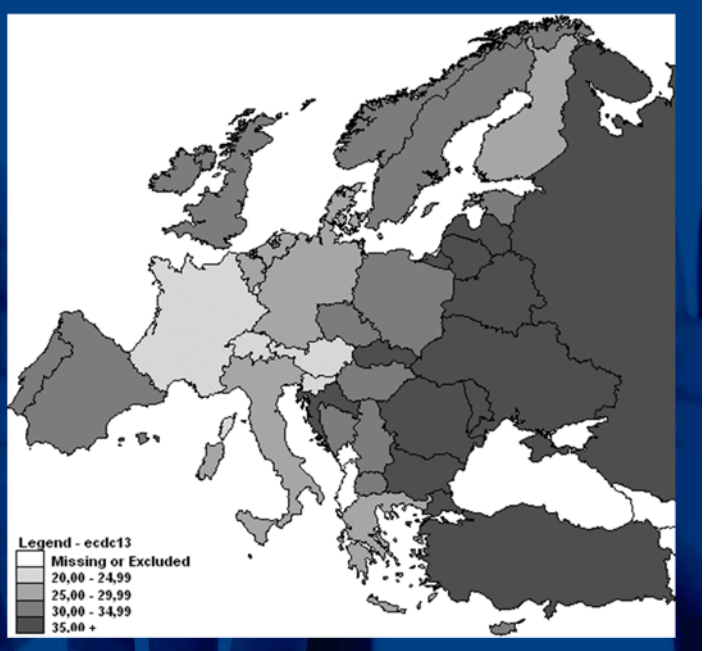
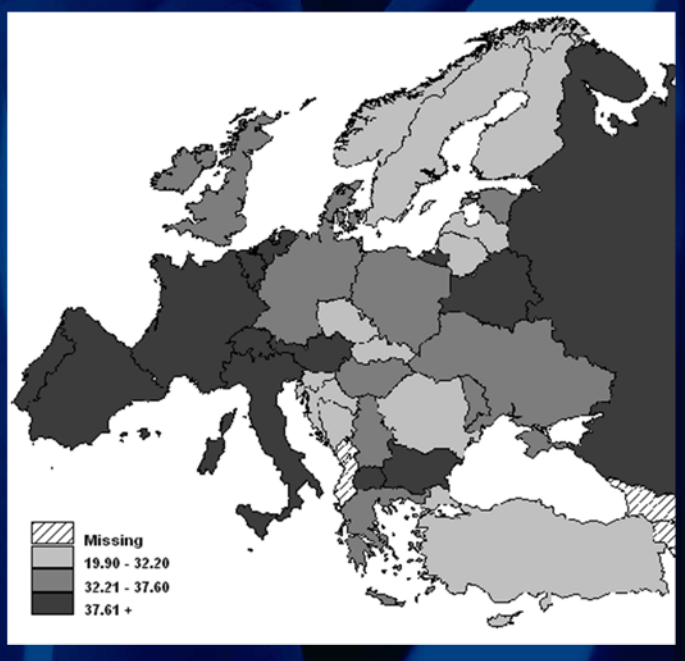


Fig.2: Tested for HIV in the last 12 months (among men without long-standing HIV infection)



* **EMIS Collaborating Partners: AT:** Aids-Hilfe Wien; **BE:** Institute of Tropical Medicine, Facultés Universitaires Saint-Louis, Ex Aequo, Sensoa, Arc-en-ciel; **BG:** National Centre of Infectious and Parasitic Diseases, Queer Bulgaria Foundation; **BY:** Встреча; **CH:** Institut universitaire de médecine sociale et préventive, Aids-Hilfe Schweiz; **CY:** Research Unit in Behaviour & Social Issues; **CZ:** Charles University (Institute of Sexology), Ceska spolecnost AIDS pomoc; **DE:** Berlin Social Science Research Center (WZB), Deutsche AIDS-Hilfe; Federal Centre for Health Education (BZgA); **DK:** Statens Serum Institut, Department of Epidemiology, stopaids; **ES:** National Centre of Epidemiology, stopsida, Ministry of Health and Social Politics; **EE:** National Institute for Health Development; **FI:** University of Tampere (Nursing Science), HIV-saatio/Aids-tukikeskus; **FR:** Institut de veille sanitaire (InVS), AIDeS, Act Up Paris, Sida Info Service, Le Kiosque, The Warning; **GR:** Positive Voice; **HR**: University of Zagreb (Humanities and Social Sciences); **HU:** Hungarian Civil Liberties Union (TASZ), Háttér; **IE:** Gay Men's Health Service, Health Services Executive; **IT:** University of Bologna, Arcigay, Instituto Superiore di Sanità; **LT**: Center for Communicable Diseases and AIDS; **LV**: The Infectiology Centre of Latvia; Mozaika; **MD**: GenderDoc-M; **MK**: Equality for Gays and Lesbians (EGAL); **NL:** schorer; **NO**: Norwegian Knowledge Centre for the Health Services, The Norwegian Institute of Public Health; **PL:** National AIDS Centre, Lambda Warszawa; **PT:** GAT Portugal, University of Porto (Medical School), Institute of Hygiene and Tropical Medicine; **RO**: PSI Romania **RS:** Safe Pulse of Youth; **RU:** PSI Russia, La Sky; **SE:** Malmö University, Riksforbundet for homosexuellas, bisexuellas och transpersoners rattigheter (RFSL); **SI:** National Institute of Public Health, Legebitra, ŠKUC-Magnus; **SK:** OZ Odyseus; **TR:** Turkish Public Health Association, KAOS-GL, Istanbul LGBTT, Siyah Pembe Ucgen Izmir; **UA:** Gay Alliance, Nash Mir, LiGA Nikolaev; **UK:** City University, London, CHAPS (Terrence Higgins Trust); **EU:** ILGA-Europe, Aids Action Europe, European AIDS Treatment Group, PlanetRomeo, Manhunt and Manhunt Cares
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