

Undiagnosed HIV infection among MSM in six Southern and Eastern European cities

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BACKGROUND

- Men who have sex with men (MSM) remain the group most at risk of acquiring HIV infection in the European Union and European Economic Area.
- Undiagnosed HIV infection contribute disproportionately to the spread of disease.
- Little is known about determinants of undiagnosed HIV infection in MSM within Europe.

OBJECTIVES

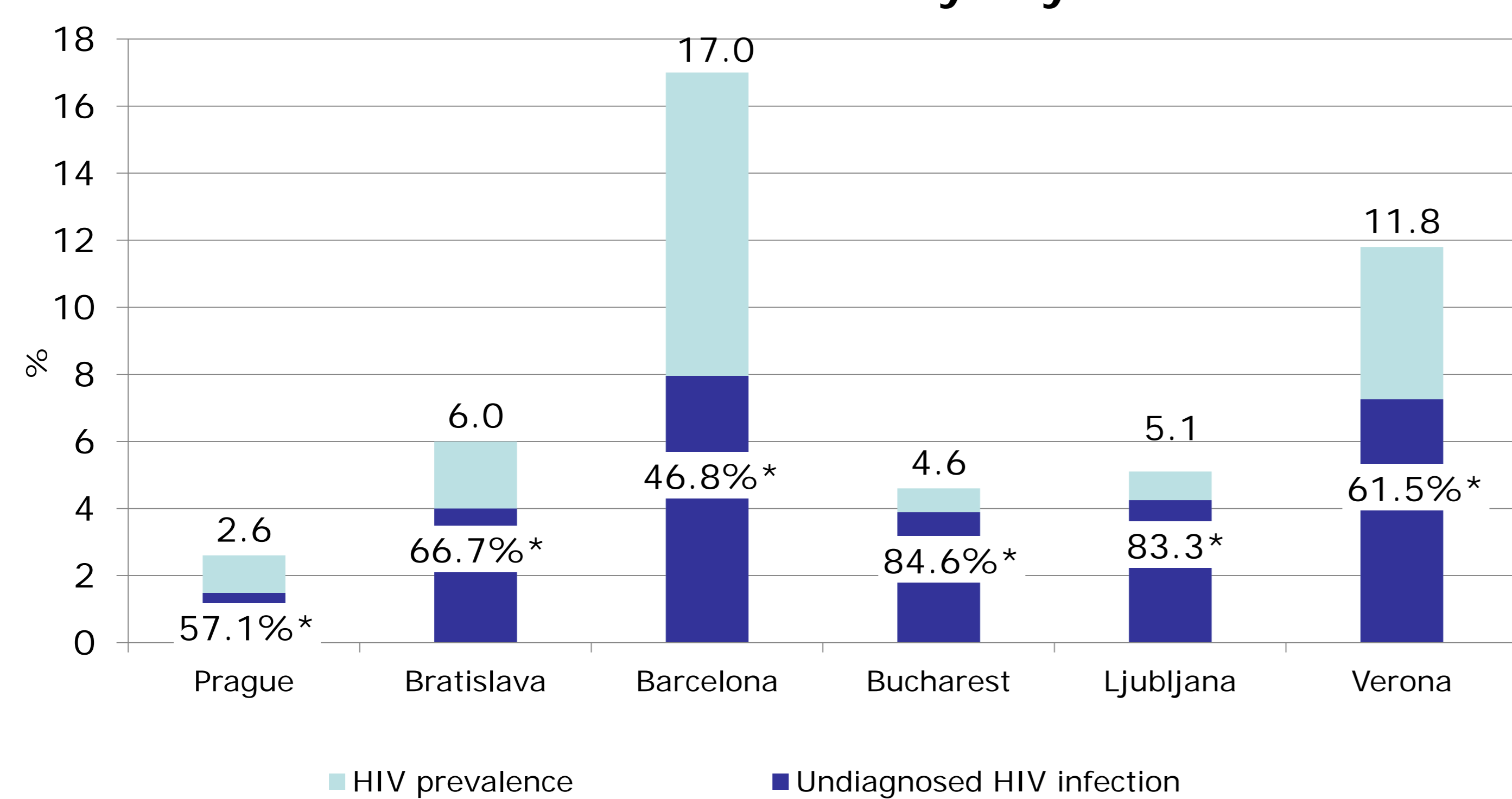
- To assess the distribution of undiagnosed HIV infection in MSM in Southern and Eastern European countries
- To describe the differences in epidemiology and behaviour between undiagnosed, diagnosed HIV-positive and HIV-negative MSM
- To identify factors associated with undiagnosed HIV infection in the study population.

METHODS

- Sialon** (2008): multi-centre bio-behavioural cross-sectional project in [Barcelona](#), [Verona](#), [Bratislava](#), [Bucharest](#), [Ljubljana](#), [Prague](#)
- Sampling:** Time-location sampling (TLS) to recruit 2,400 men attending different commercial venues
- Instruments:** A self-administered behavioural questionnaire and oral fluid collected kits to estimate HIV prevalence
- Study population:** Men who had had any kind of sex (anal, oral or other non-penetrative sex) at least once with another man during the previous year, agreed to provide an oral fluid sample and had signed an informed consent form
- Dependent variable:** 3 Categories related to HIV status were created -- **Diagnosed HIV-positive** **Undiagnosed HIV-positive** **HIV-negative**
- Analysis:** 1) Bivariate analysis to compare epidemiological and behavioural characteristics by HIV status. 2) HIV prevalence was calculated with corresponding 95% confidence interval (CI). 3) Multi-level analysis to identify factors associated with undiagnosed HIV.

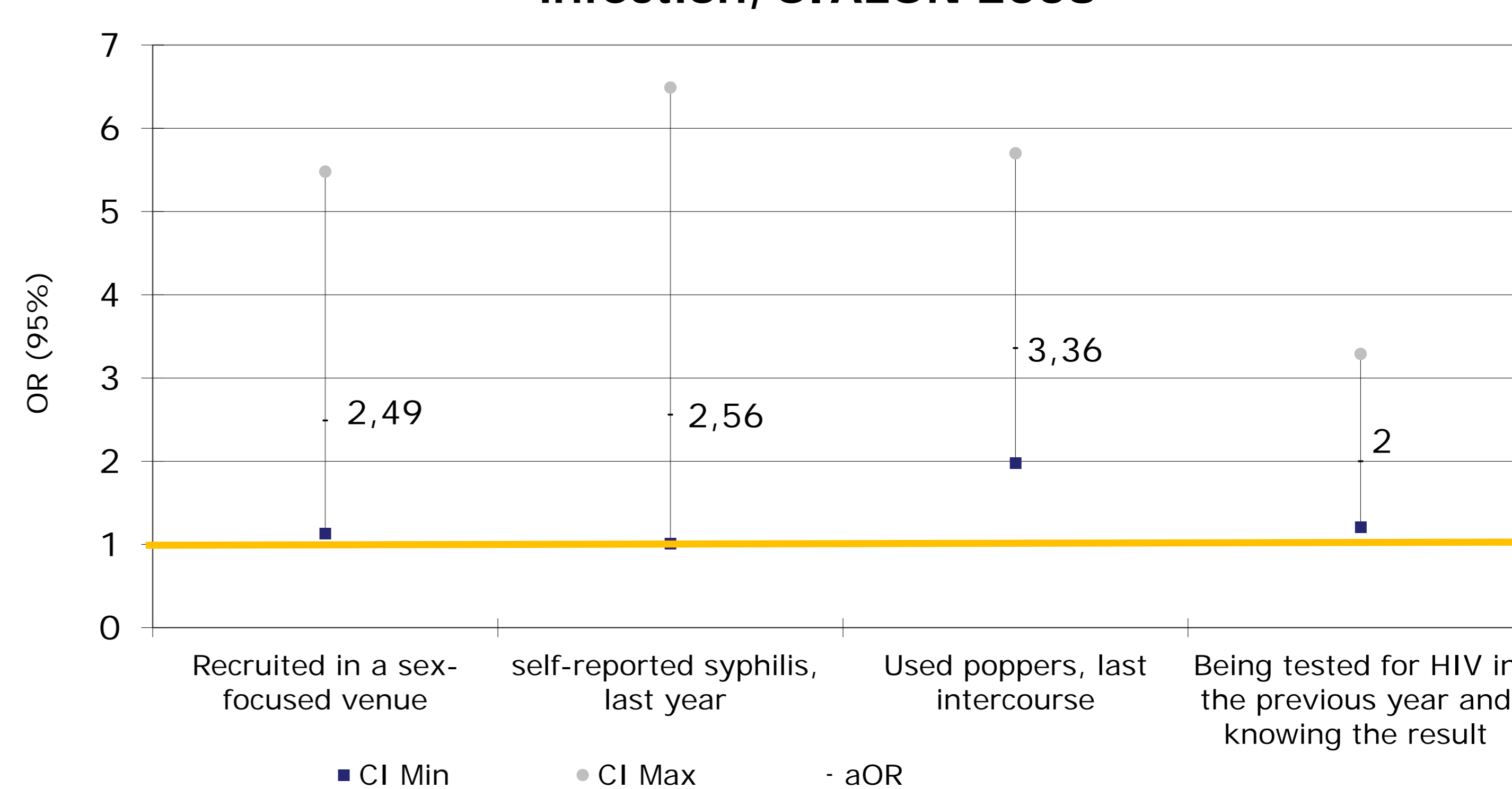
RESULTS

HIV Prevalence and proportion of undiagnosed infection in MSM by city^{a,b}



a. $p < 0,001$ (prevalences); b. $< 0,05$ (undiagnosed proportions); *Undiagnosed infection.

Multivariate analysis predicting undiagnosed HIV infection, SIALON 2008



*Multilevel model adjusted by age; °Undiagnosed HIV+ MSM were compared to VIH-

Epidemiological characteristics of participants by HIV status

* $p < 0,001$

Mean age			Mean n° casual partner, last 6 months			Last sex in sex focused venues			Self-reported STI, last 12 months		
Diagnosed HIV+	Undiagnosed HIV+	HIV-	Diagnosed HIV+	Undiagnosed HIV+	HIV-	Diagnosed HIV+	Undiagnosed HIV+	HIV-	Diagnosed HIV+	Undiagnosed HIV+	HIV-
39*	34	32	19*	14	9*	36%	32%	18%*	Syphilis: 5	9*	2*
									Condyloma: 15*	1.2	2.5

CONCLUSIONS

- Many HIV infections remain undiagnosed and there is evidence of the persistence of frequent risk behaviours and STI despite knowledge of HIV-positive status in Southern and Eastern Europe, which indicates the need for a multidimensional approach to HIV/STI prevention.
- Access to HIV testing should be considered a priority in prevention programs targeting MSM, especially in Eastern Europe.