

THE 2020 ESTIMATES OF MEN HAVING SEX WITH MEN PREVALENCE IN BELGRADE, NOVI SAD, KRAGUJEVAC AND NIŠ, SERBIA

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Background: Epidemic potential is influenced by a combination of the HIV prevalence, the size of the population at risk, and quantified risk. In Serbia HIV epidemic is concentrated among men who have sex with men (MSM). While Serbia has existing data on HIV prevalence, new estimates for the size of the MSM population were needed, using the same methodology as previous studies for comparison.

Methods and Objectives: To estimate the MSM population size in Belgrade, Novi Sad, Kragujevac, and Niš in 2020, we used the classic multiplier method, an indirect estimation technique. This method involves combining data from two independent sources that overlap in the known way: survey data (proportion of respondents aged 18-49 who used specific services in a certain time and location) and benchmark data (number of MSM aged 18-49 receiving: a) prevention services in community, obtained from the national HIV database, and b) voluntary counselling and testing (VCT) services in Belgrade and Novi Sad obtained from national VCT database).

Results: In Belgrade, the 2020 MSM prevalence estimate was approximately 17,000, double the estimates from 2012, 2011, and 2009/2010 (7,000 to 9,000) when applying prevention services in community as benchmark. Estimates for community-based HIV testing in Belgrade were higher for 2020, as well as for the previous years applying HIV testing in Institute for Students Health Care in Belgrade as benchmark (17,000 vs. around 3,000). In Novi Sad, the 2020 estimate applying prevention services in community was 5,442, higher than in 2012 (3,863) but lower than in 2011 and 2009 (8,721 and 8,335). In Kragujevac, the 2020 estimate applying prevention services in community was 3,632, lower than in 2012 (4,483). In Niš, the 2020 estimate applying prevention services in community was higher than the community-based HIV testing estimate (3,556 vs. 2,052). The most reliable 2020 estimates using the multiplier method were: for Belgrade -17,000 MSM aged 18-49 (4.7% of the total male population aged 18-49); for Novi Sad: 5,442 MSM aged 18-49 (6.8%); for Kragujevac: 3,632 MSM aged 18-49 (10%); for Niš: 3,556 MSM aged 18-49 (6.6%).

Conclusions: Multiple estimation methods and repeated measurements using the same methodology are necessary for verification and validation of results. A consensus among relevant actors is required to determine the best estimate of the MSM population size in Serbia.

Keywords: estimates, prevalence, MSM, Serbia, multiplier method, accuracy