AIDS RESEARCH AND HUMAN RETROVIRUSES
Volume 30, Number 5, 2014

DOI: 10.1089/aid.2013.0237

Underreporting of HIV Transmission Among Men Who Have Sex with Men in the Ukraine

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EDITOR: Knowledge of the modes of HIV transmission is essential for targeting prevention interventions, and yet the accuracy and completeness of reporting of modes of transmission are often poor, particularly in places where reporting of certain risk behaviors can lead to stigmatization or even legal consequences.[1] Data suggest that sexual contact between men is frequently underreported, even in countries where stigma is minimal and there are no associated adverse legal consequences. For instance, in the United States, ~75% of the 7,612 men reported with HIV infection in 2011 who had no reported risk factor for transmission were later reassigned to male–male sexual contact.[2] HIV case surveillance data may be particularly sensitive to underreporting of transmission category because they require that physicians ascertain this information from their patients and then report it. Reluctance by clinicians to enquire about their patients' sexual behavior and hesitation by patients to self-report risk may lead to misclassification or nonreporting of transmission risk. Anonymous surveys are likely to provide more accurate information on risk behavior among men who have sex with men (MSM) than HIV case surveillance data. We compared findings from HIV seroprevalence surveys to HIV case surveillance data to estimate the magnitude of underreporting of HIV among MSM in Ukraine over a 7-year period (2005–2011).

In Ukraine, surveillance of HIV and AIDS cases is conducted through nationally mandated screening and case-reporting systems. From January 1, 2005 through December 31, 2011, a total of 494 HIV cases were reported among MSM to the Ukraine HIV case surveillance system, representing 0.4% of all reported cases.[3] The number of reported cases among MSM increased from 20 in 2005 to 143 in 2011 (Fig. 1). Twenty-three percent of reported MSM were under 25 years of age, and 87% were under 40 years of age at the time of diagnosis. Reported cases among MSM were concentrated in the city of Kyiv and the oblasts of Donetsk and Zaporozhe.

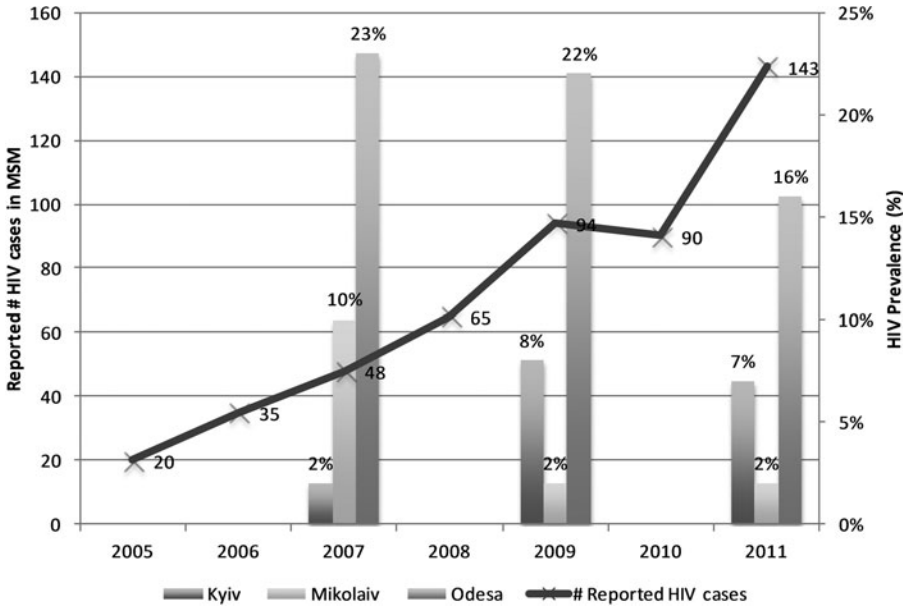

FIG. 1. Reported HIV cases nationally among men who have sex with men (MSM), 2005–2011 and HIV seroprevalence surveys among MSM by city, 2007–2011 in the Ukraine.

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The case reporting data, however, are in sharp contrast to seroprevalence data collected through sentinel surveillance activities conducted in select cities at 2-year intervals between 2007 and 2011 using respondent-driven sampling methods to generate estimates of HIV seroprevalence in MSM. These surveys, which recruited progressively larger numbers of participants in each participating city, found the prevalence to be as high as 23% in Odesa in 2007. In two of the three cities that participated in all three rounds, HIV prevalence among MSM has been at moderate or high levels for most or all of the period of surveillance (Fig. 1). For instance, in Odesa, a region of more than 2 million population, where 36 HIV cases were reported in MSM from 2005 to 2011, HIV prevalence in MSM ranged from 23% in 2007 to 16% in 2011.[4–6] The 2011 surveys were conducted in all regions of Ukraine and suggest an overall MSM prevalence of approximately 6% nationwide. Even with the very conservative estimate of the MSM population size in Ukraine in 2011 (176,000),[7] this would suggest a minimum of 11,000 MSM with HIV infection, further supporting the hypothesis that there is a significant underreporting and/or misclassification of MSM in the case-reporting system, presumably as heterosexual men.

While this discrepancy does not prove that there is misclassification, it does strongly suggest there is either gross underreporting of MSM cases or that we can expect to see an increase in the number of cases in the future. An additional factor potentially contributing to the underdiagnosis of MSM may be a failure of MSM to test for HIV. Improvements in ascertaining risk-factor information from patients is important to monitor the epidemic and, more importantly, to provide relevant risk factor counseling. Multiple surveillance systems will be necessary to understand the epidemic fully.

Author Disclosure Statement

No competing financial interests exist.

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