



Review

Uncovering the epidemic of HIV among men who have sex with men in Central Asia[☆]



Andrea L. Wirtz^{a,b}, Anna Kirey^c, Alena Peryskina^d, Fabrice Houdart^e, Chris Beyrer^{a,*}

^a Johns Hopkins Bloomberg School of Public Health, USA

^b Johns Hopkins Medical Institute, USA

^c Human Rights Watch, Kyrgyzstan

^d AIDS Infoshare, Moscow, Russia

^e Central Asia Country Unit, World Bank, DC, USA

ARTICLE INFO

Article history:

Received 9 May 2013

Received in revised form 26 June 2013

Accepted 28 June 2013

Available online 29 July 2013

Keywords:

Central Asia

Men who have sex with men (MSM)

HIV

Epidemiology

Substance use

Human rights

ABSTRACT

Background: Research among people who inject drugs (PWID) in Central Asia has described same sex behavior among male PWID and may be associated with HIV and other infections. Little is known about the population of men who have sex with men (MSM) and the burden of HIV among MSM in Central Asian countries.

Methods: We conducted a comprehensive search of peer-reviewed publications and gray literature on MSM and HIV in the region. Search strategies included terms for MSM combined with five Central Asian countries and neighbors, including Mongolia, Afghanistan, and Xinjiang Province, China.

Results: 230 sources were identified with 43 eligible for inclusion: 12 provided HIV prevalence and population size estimates for MSM, none provided incidence estimates, and no publications for Turkmenistan were identified. National reports estimate HIV prevalence among MSM to range from 1 to 2% in Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, Xinjiang, to 10% in Mongolia. Biobehavioral studies estimated HIV prevalence at 0.4% in Afghanistan and 20.2% in Kazakhstan. Sexual identities and behaviors vary across countries. Injection drug use was relatively low among MSM (<5% for most). Non-injection drugs, alcohol use prior to sex, and binge drinking were more common and potentially associated with violence. Criminalization of homosexuality (Afghanistan, Uzbekistan, and Turkmenistan) and stigma has limited research and HIV prevention.

Conclusion: Improved understanding of risks, including potential linkages between sexual exposures and substance use, among MSM are important for response. The little known about HIV among MSM in Central Asia speaks to the urgency of improvements in HIV research, prevention, and care.

© 2013 Elsevier Ireland Ltd. All rights reserved.

Contents

1. Introduction	S18
2. Methods	S18
3. Results	S18
3.1. Risks for HIV among MSM	S21
3.2. HIV prevention	S21
3.3. The legal and human rights context for MSM/LGBT populations	S21
4. Discussion	S22
Role of funding source	S22
Contributors	S23
Conflict of interest	S23
Acknowledgements	S23
Appendix A. Supplementary data	S23
References	S23

[☆] Supplementary material can be found by accessing the online version of this paper. See [Appendix A](#) for more details.

* Corresponding author at: Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, 615 North Wolfe Street, E 7152, Baltimore, MD 21205, USA. Tel.: +1 410 614 5247; fax: +1 410 614 8371.

E-mail addresses: awirtz@jhsph.edu (A.L. Wirtz), cbeyrer@jhsph.edu (C. Beyrer).

1. Introduction

HIV epidemic trends have declined globally in many settings and populations, yet have remained stable or increasing across Eastern Europe and Central Asia (EECA; [UNAIDS, 2012b](#)). The predominant mode of transmission in most affected states, including the largest HIV epidemics in the EECA, Russia and Ukraine, has been among people who inject drugs (PWID; [UNAIDS, 2012b](#); [Strathdee and Stockman, 2010](#)). A comprehensive review of HIV infections among men who have sex with men (MSM) indicates that the HIV epidemic has expanded globally, though relatively little studied in Central Asia ([Beyrer et al., 2012](#)), and the majority of new infections across European and Central Asian countries are now among MSM ([ECDC, 2010](#)). Of the Central Asian states that report to UNAIDS and/or have sufficient data, Kyrgyzstan and Kazakhstan have reported increasing epidemic trends among adults since 2001, while Tajikistan's epidemic has been stable ([UNAIDS, 2012b](#)). Turkmenistan does not report on HIV to the outside world, and the status of the HIV epidemic in this closed state is unclear. Data from Uzbekistan are similarly limited ([UNAIDS, 2012b](#)). Though HIV prevalence is estimated to be less than 1% among adult populations regionally, coverage of ART remains fairly low, estimated at 6% in Afghanistan and between 20 and 29% of those that reported coverage estimates in the last UNAIDS report (Tajikistan, Kazakhstan, Kyrgyzstan) ([UNAIDS, 2012a](#)).

The predominant mode of HIV transmission across the region has been parenteral exposures among PWID ([UNAIDS, 2012b](#); [Strathdee et al., 2010](#); [Strathdee and Stockman, 2010](#); [Jolley et al., 2012](#)), with slightly higher prevalence reported among male than female PWID ([Des Jarlais et al., 2013](#)). Prior to the initiation of HIV research among MSM in Central Asia, earlier research among PWID and other key populations, including truckers, and prisoners, began to identify same-sex behaviors and risk for HIV among these groups, particularly in Tajikistan and Afghanistan, and continue to be documented to-date ([Beyrer et al., 2009](#); [Stachowiak et al., 2006](#); [Thorne et al., 2010](#); [Todd et al., 2007a, 2007b, 2011](#), Afghanistan National Strategic Framework for HIV/AIDS (2008), [Todd et al., 2010](#); [JHU and NACP, 2010](#); [Vu et al., 2013](#)). In these analyses, there is often increased magnitude in risks for infection, though associations rarely remain significant, likely due to relatively small samples sizes. In Afghanistan, for example, the adjusted odds ratio comparing MSM-PWID to other male PWID was 1.35 for HBV infection (95% CI: 0.61–3.00). In bivariate models, syphilis infection (OR: 1.44, 95% CI: 1.10–1.89) and HCV (OR: 1.59, 95% CI: 1.04–2.44) were significantly higher for PWID-MSM but not significant in multivariable models ([Todd et al., 2010, 2007a](#)). Among PWID in Kabul, ever having sex with a male was one risk factor for HCV (37% prevalence), along with ever being in prison, and risky injection practices ([JHU and NACP, 2010](#)). These findings establish a research agenda to understand the risk for and prevalence of HIV and STI among MSM in Central Asia and highlight the importance of assessing and intervening on the multiple parenteral and sexual risk behaviors for HIV among both MSM and PWID groups.

Given the high prevalence of HIV among MSM in both concentrated and generalized epidemics globally, understanding the epidemiology and potential risks for HIV among MSM is important to informing HIV programs and intervening proactively to mitigate future epidemics. We review the available data on HIV prevalence and sociobehavioral risks, including investigating linkages of substance use risks among MSM in Central Asia. These include: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan, as well as the related countries and regions of Mongolia, Afghanistan, and the Xinjiang (formerly East Turkestan) region of Western China, which together comprise the very large Central Asian region. We present information that has been gathered about

risks for HIV among MSM and present gaps and areas of improvement for further research and surveillance.

2. Methods

We conducted a comprehensive search in March 2013 to assess HIV epidemiology, substance use, and other sociobehavioral risks for HIV among MSM in five Central Asian countries and Mongolia, Afghanistan, and Xinjiang Province, China. A systematic literature review was conducted through searches in Pubmed and Embase to identify peer-reviewed publications. Given a hypothesis of limited publications, we searched by combining country and MSM terms and later restricted, according to criteria, during the abstract review. We focused the search on recent publications, limited to January 1, 2005 to March 30, 2013, and English language publications. No publications were excluded on the basis of study design or sample size. The peer-reviewed literature search was supplemented by a comprehensive search of gray literature available in websites related to substance use, HIV, and/or MSM in these countries. We abstracted data on HIV prevalence, estimated MSM population size, as well as self-reported substance use, sexual risks, exposure and uptake of HIV prevention. Full details of our search terms, gray literature search, and data abstraction are presented in the Supplementary Material.¹ [Fig. 1](#) displays the PRISMA search process.

3. Results

A total of 230 non-duplicate peer-reviewed publications and reports were identified. Four non-English publications were excluded from analysis. Of these, 43 were eligible with 12 providing quantitative information for HIV or population prevalence estimates and 20 providing information on sociobehavioral characteristics, exposures, and human rights. Five publications provided samples sizes, totaling 2373 participants from four of the included countries. The majority of information specifically related to HIV prevalence among MSM comes from national surveillance, UNAIDS reports, and UNGASS indicators ([Mongolia National Committee on HIV and AIDS, 2012](#); [Afghanistan National AIDS Control Program, 2010](#); [Republic of Tajikistan, 2011](#); [Government of Kazakhstan, 2010](#); [UNAIDS, 2012a,b](#)). No data on MSM in Turkmenistan, and no regional data on HIV incidence were identified. National reports provided HIV prevalence estimates for MSM ranging from 1 to 2% for Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan in 2011, and high as 6.8% in Tashkent, Uzbekistan (2009; [UNAIDS, 2012a, 2012b](#)). A marked increase from 2 to 10% prevalence has been reported between 2005 and 2011 in Mongolia ([UNAIDS, 2012b, 2012a](#); [Mongolia National Committee on HIV and AIDS, 2012](#)). National reports are compiled to present the overview of the country's epidemiology and coverage of interventions and often exclude details of the methodology, sample size, and location(s) of surveillance. This makes it difficult to assess reliability and generalizability of estimates. Substantial changes in estimates may be an artifact of changes or improvements in surveillance rather than an actual increase in HIV prevalence among these men, as experts have explained for the observed increase from 2 to 10% in Mongolia ([Mongolia National Committee on HIV and AIDS, 2012](#)). Other concerns, such as the potential impact of selection bias on the certainty of point estimates in national surveillance ([Hogan et al., 2012](#)) and the influence of heterogeneity of epidemics within countries on pooled estimates ([Platt et al., 2013](#)), should be considered when reviewing surveillance estimates. Currently, government run surveillance and programs face social barriers, as articulated by the Tajikistan report, "Tajik MSM remain one of the most difficult groups to reach. . . there is no credible assessment regarding their number. Social stigma toward homosexuality in Tajikistan makes this population inaccessible for the health and social services" ([Republic of Tajikistan, 2011](#)).

¹ Supplementary material can be found by accessing the online version of this paper. See [Appendix A](#) for more details.

Download English Version:

<https://daneshyari.com/en/article/1069910>

Download Persian Version:

<https://daneshyari.com/article/1069910>

[Daneshyari.com](https://daneshyari.com)