

**Using community-based rapid HIV screening
among men who have sex with men in a
behavioral sero-surveillance survey in
Kazakhstan**

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Outline

- Background on research and surveillance to date on MSM in Kazakhstan
- Biological/behavioral epidemiologic study on MSM in Almaty, Kazakhstan
 - Methods
 - Results
 - Public health and policy implications

Background

- MSM at high risk of HIV around the world
 - Prevalence increasing in MSM in many places
 - MSM tend to have higher prevalence than general population
 - Stigma affects behavior
 - Anal sex has high per-contact transmission risk
 - MSM may have less access to HIV prevention services, such as STI services

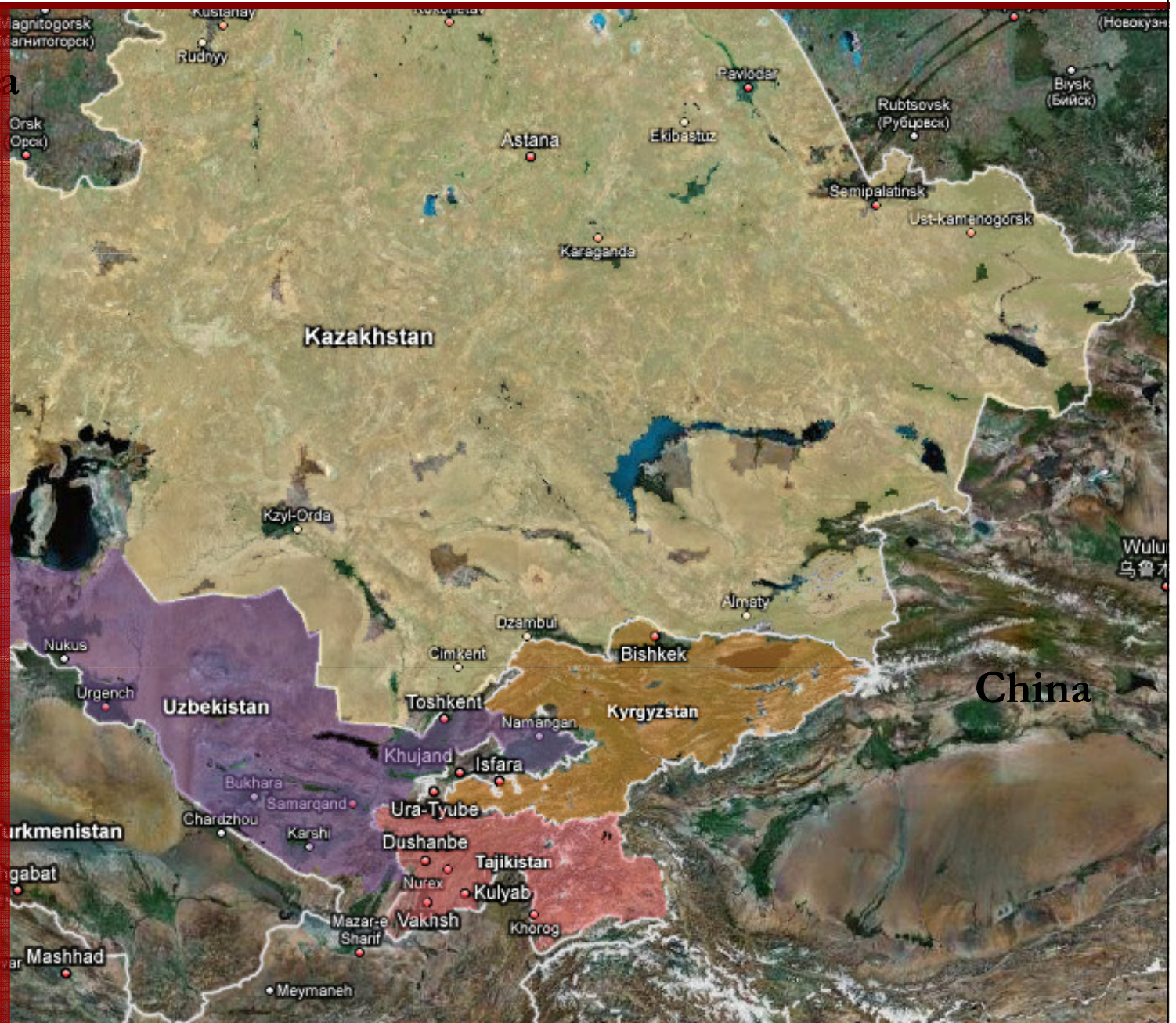
Kazakhstan

Kazakhstan

Population:
15.3 million

Territory:
2.7 million km

9th largest country
on earth



Background

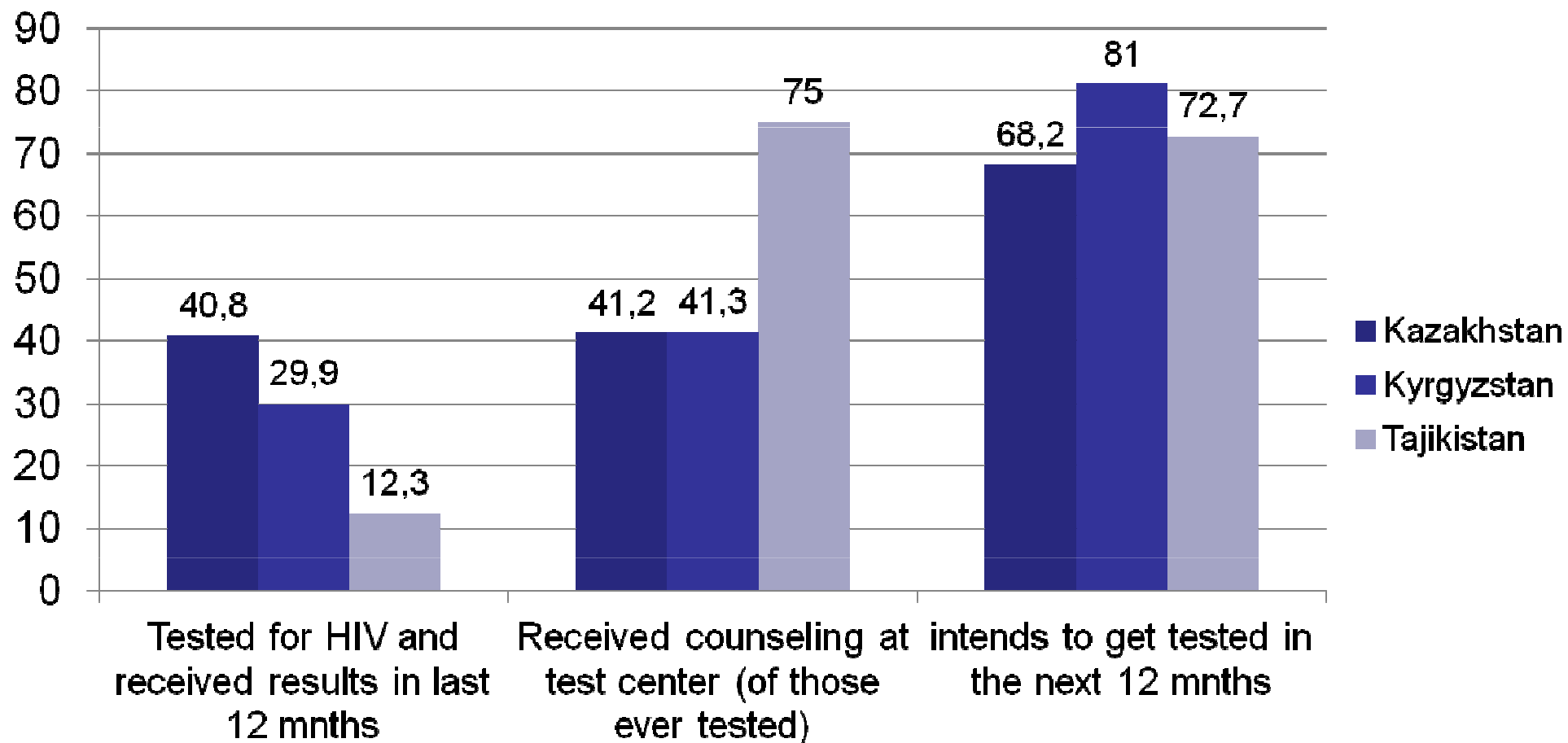
- HIV prevalence in Kazakhstan among MSM is uncertain
 - Results of sentinel surveillance: 0% (2007); 0.2% (2008)
 - UNAIDS estimates 1% prevalence among MSM in Kazakhstan
 - Probability sampling needed to provide accurate estimates

Risk behaviours among MSM in Kazakhstan, Kyrgyzstan and Tajikistan

Indicators (Behaviors)	Total (N=738)	Kazakhstan (N=289), %	Kyrgyzstan (N=205), %	Tajikistan (N=289), %
Used condom during last anal sex act with another men	42.8	57.1	47.8	24.9
Always uses condom for sex with regular partners	14.2	20.8	23.1	2.8
Always uses condom for sex with casual partners	40.8	55.1	44.9	29.7
Always uses condom for sex with commercial partners	19.7	81.6	66.7	3.6

Source: PSI Research Division, "Kazakhstan, Kyrgyzstan, Tajikistan: HIV and TB TRaC Study among Men who Have Sex with Men in Almaty, Bishkek, Chui, and Dushanbe," PSI Social Marketing Research Series, (2010) <<http://www.psi.org/resources/publications>>.

VCT utilization (%) among MSM in Kazakhstan, Kyrgyzstan and Tajikistan (2010)



Source: PSI Research Division, "Kazakhstan, Kyrgyzstan, Tajikistan: HIV and TB TRaC Study among Men who Have Sex with Men in Almaty, Bishkek, Chui, and Dushanbe," PSI Social Marketing Research Series, (2010) <<http://www.psi.org/resources/publications>>.

Methods

- RDS used to recruit and interview 400 MSM
 - RDS used to recruit hidden high-risk populations around the world
 - Peer-driven, quasi-random sampling method
 - Four seeds selected to represent the diversity of MSM in Almaty
 - Participants reimbursed for completing questionnaire and for recruiting a limited number of other participants

Screening for HIV

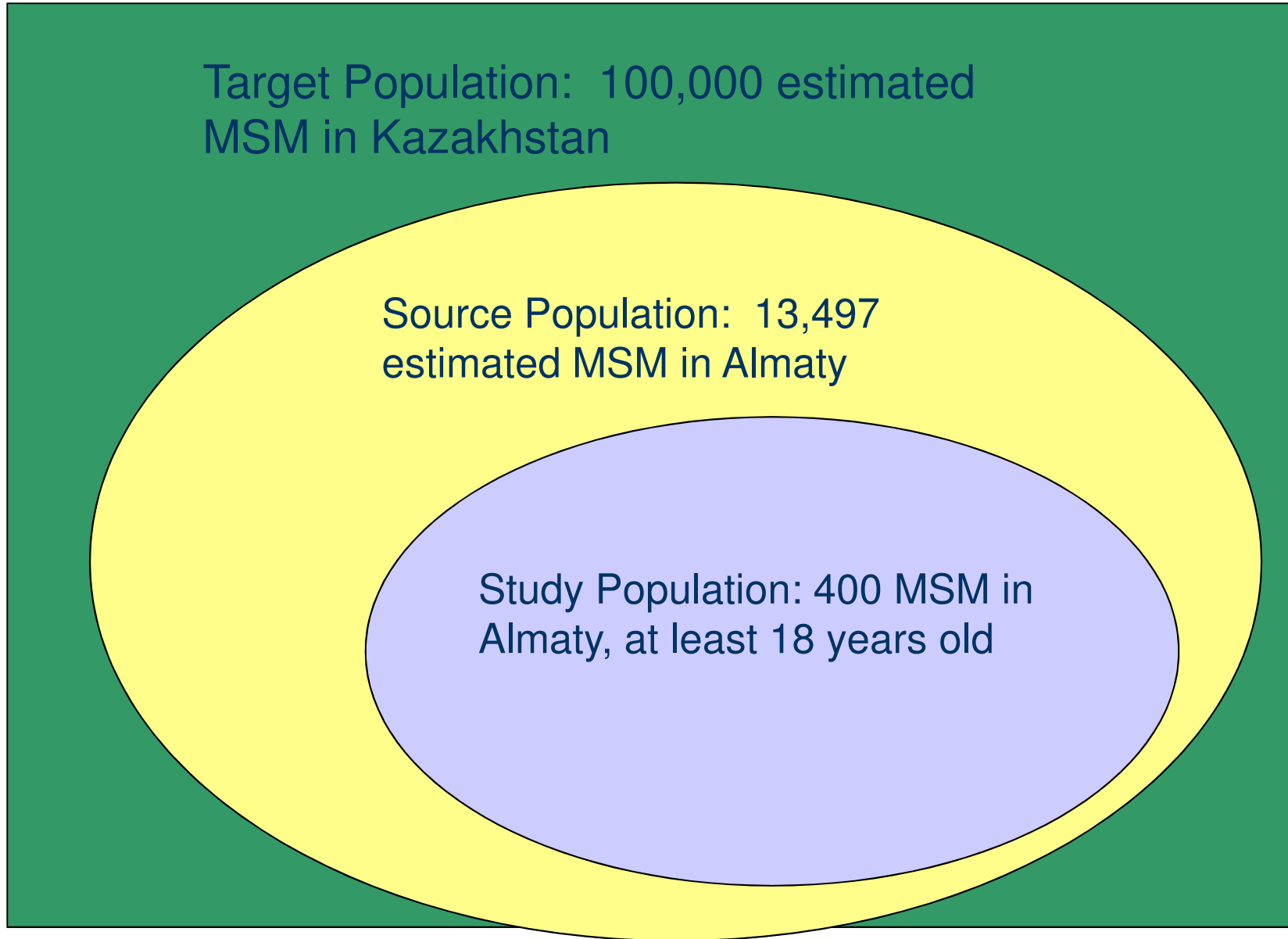
- finger-prick based test (*Retrocheck HIV sensitivity 100%, specificity 99.8%, made by Qualpro Diagnostics of India*).
- **quality assurance:** *assessed for sensitivity and specificity against 10 known HIV-positive and 40 known HIV-negative samples (JHU serology laboratory, a CLIA-certified international reference lab)*
- All HIV-negative samples tested negative and all HIV-positive samples tested positive.

Population

Target Population: 100,000 estimated
MSM in Kazakhstan

Source Population: 13,497
estimated MSM in Almaty

Study Population: 400 MSM in
Almaty, at least 18 years old



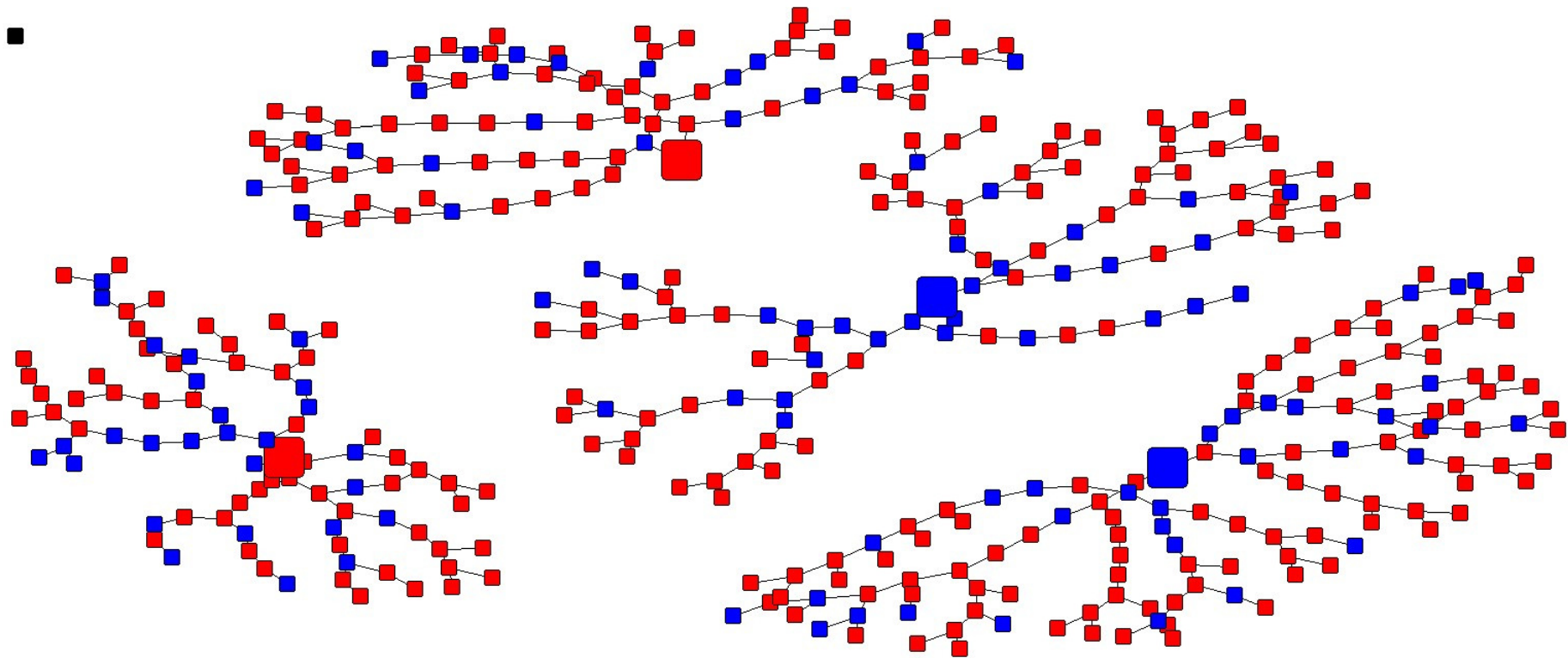
Methods

- Data collection took place from March 2010 to August 2010
- Inclusion criteria: 18 years old, had anal sex with another man in last 12 months
- Exclusion criteria: previous participation in survey
- Questionnaire included approximately 100 variables

Questionnaire sections

Sections	Example of data collected
Demographics	Marital status, education, country of origin, income
Sexual behavior	Sexual orientation, positioning with male partners, number and types of male and female partners, use of HIV prevention methods
Alcohol/drug use history	Use of alcohol in last 30 days, use and types of injection drugs in past 12 months, sex while high in past 12 months
HIV testing experiences	Ever testing for HIV, where and when tested, result of most recent test, currently treated for HIV
Health conditions	STI symptoms, STI diagnosis, circumcision
HIV prevention activities	Access to condoms, lubricant, HIV prevention/education
Human rights issues	Being denied housing, health care, beaten up, raped

Recruitment patterns of MSM



Blue nodes: Participants with unprotected anal sex with multiple male partners in last 12 months

Red nodes: Participants who did not have unprotected anal sex with multiple male partners in last 12 months

Results

Participant characteristics

Characteristic	Crude prevalence (N)	Adjusted prevalence (95% CI)*
Sexual orientation		
Heterosexual	7.7	10.1
Homosexual	64.5	55.0
Bisexual	18.8	18.4
Transgender	5.0	5.2
Marital status		
Married	15.8	15.9
Live with male partner	24.7	31.5
Single	53.0	45.4
Told friends, family, or health care provider about sexual orientation	25.3	21.8
Had a regular place to live in last 12 months	82.0	88.6
Attended gay/bar club in last 12 months	55.9	33.9
Looked for male partners on internet, last 12 months	39.2	16.9

* RDSAT adjusted for homophily, network sizes

Risk behaviors/risk factors

Characteristic	Crude prevalence (N)	Adjusted prevalence (95% CI)*
Positive screening test for HIV	13.3	20.2
Ever injected drugs	8.3 (33)	3.9 (1.9-6.1)
Used noninjection drugs in last 12 months	20.5 (81)	10.9 (6.2-16.1)
Ever had anal sex without a condom	87.5 (345)	82.5 (74.6-89.6)
STI symptoms in last 12 months	14.2 (55)	6.0 (3.0-9.7)
Unprotected sex with multiple male partners in the last 12 months	28.0 (110)	13.0 (7.7-17.9)
Had a male trade partner in last 12 months	26.0 (100)	12.9 (7.9-19.4)

* RDSAT adjusted for homophily, network sizes

Health services access

Characteristic	Crude prevalence (N)	Adjusted prevalence (95% CI)*
Visited a doctor in last 12 months	32.0	23.1
Ever had an HIV test	36.0	33.2
“Very difficult” access to free condoms	65.2	87.0
“Very difficult” access to water/silicone-based lubricants	30.2	38.1
Conversation with outreach/prevention worker, counselor on how to protect against HIV infection in last 12 months	24.7	7.6

* RDSAT adjusted for homophily, network sizes

Public health and policy implications

- Research found high levels of risk behavior and human rights issues
- There is an opportunity to prevent an expansion of HIV epidemic among MSM
 - HIV prevention methods can be enhanced
- It will take creativity and more knowledge to improve access for some MSM
 - Hidden population of MSM exist in Almaty

Public health and policy implications

- Anonymous, community-based rapid screening for HIV was a motivation to participate.
- The results will inform prevention activities and innovative outreach programs with access to community-based rapid testing with the same day results for MSM

Consensus statement

“...HIV Rapid testing (RT) is the most effective way to increase HIV testing and counseling (HTC) uptake among MARPs and to ensure that people know their HIV status in a timely manner. Evidence ... suggests that HIV RT is comparable or superior to more complex HIV testing methodologies, such as EIA or Western Blot...should be used across the full range of HIV service provision.”

Source: Berry, S., M.C. Escobar, and H. Pitorak. 2012. *Rapid Testing–Rapid Results: Scaling Up HIV Rapid Testing with Same-Day Results in the Asia-Pacific Region*. Arlington, VA: USAID’s *AIDS Support and Technical Assistance Resources, AIDSTAR-One, Task Order 1*.

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