



TRAC SUMMARY REPORT PSI DASHBOARD

CENTRAL ASIAN REPUBLICS (2012): HIV AND TB TRAC STUDY UNDERSTANDING RISK BEHAVIORS ASSOCIATED WITH HIV TRANSMISSION AND UTILIZATION OF HIV PREVENTION SERVICES AMONG FEMALE SEX WORKERS

Small Scale Midterm Study

Sponsored by:



PSI's Four Pillars

Bottom Line Health Impact * Private Sector Speed and Efficiency * Decentralization, Innovation,
and Entrepreneurship * Long-term Commitment to the People We Serve

Research & Metrics
Population Services International
1120 Nineteenth Street NW, Suite 600
Washington, D.C. 20036

Central Asia Republics (2012): HIV and TB TRaC study understanding risk behaviors associated with HIV transmission and utilization of HIV prevention services among SWs in Almaty (Kazakhstan), Chui Oblast (Kyrgyzstan), and Dushanbe (Tajikistan). Small Scale Midterm Study.

PSI Research & Metrics
2012

© Population Services International, 2012

Contacts:

Leila Koushenova, Regional Representative of PSI/CAR
Population Services International
Almaty, Kazakhstan
050051, Dostyk 180
Koktem Business Center, 3rd fl
Telfax: +7 (727) 263 11 36
+7 (727) 262 70 36
+7 (727) 390 90 50, 51, 52, 53
E-mail: leila.koushenova@psi.kz

Amy Gregowski, Regional Researcher for Asia and Eastern Europe
Population Services International
E: agregowski@psi.org

Suggested citation of this work:

*PSI Research & Metrics, "Central Asia Republics (2012): HIV and TB TRaC study understanding risk behaviors associated with HIV transmission and utilization of HIV prevention services among SWs in Almaty (Kazakhstan), Chui Oblast (Kyrgyzstan), and Dushanbe (Tajikistan). Small Scale Midterm Study." PSI Social Marketing Research Series, (2012)
<<http://www.psi.org/resources/publications>>.*

TABLE OF CONTENTS

RESEARCH TEAM.....	4
ACKNOWLEDGEMENTS.....	5
LIST OF ABBREVIATIONS.....	6
EXECUTIVE SUMMARY.....	7
BACKGROUND & RESEARCH OBJECTIVES.....	8
METHODOLOGY.....	10
SURVEY FINDINGS.....	12
I. DEMOGRAPHIC PROFILE.....	12
II. MONITORING DATA.....	14
CONCLUSION AND PROGRAM RECOMMENDATIONS.....	32
ANNEX.....	37
ANNEX A: MONITORING TABLES.....	37
ANNEX B: RELIABILITY ANALYSIS.....	49

RESEARCH TEAM:

Study design, field supervision, data analysis and report writing conducted by:

Marat Bakpayev

Julie Archer

Amy Gregowski

Shana Aufenkamp

Vu Ngoc Khanh

Ainura Moldokmatova

Janet Kim

Murat Narkulov

Olivia Dowling

Julia Gall

Maxim Kan

Field data collection conducted by:

Research Agency “BISAM Central Asia”

ACKNOWLEDGEMENTS:

The research represented in this report was supported by the USAID Dialogue on HIV and TB Project.

PSI/CAR conducted all training, supervision, and oversight of the data collection process. PSI/CAR's research team designed the study and analyzed the findings as well. Key findings and program recommendations described in this report have been identified in consultation with multiple partner organizations including Countries' Ministries of Health, Republican AIDS Centers, Republican TB Centers, USAID, Global Fund, AFEW, ICAP, IOM, KNCV, Project HOPE, UNDP, UNAIDS, UNICEF, UNODC.

We would like to acknowledge support provided by local NGOs in facilitating the data collection in all three countries. In addition, we would like to express our gratitude to the outreach workers who participated in this study for their willingness to share their experiences and inform efforts to increase results generated through effective evidence-based HIV prevention interventions. Finally, we acknowledge the USAID financial support that made the study and this final report possible.

**Leila Koushenova,
Regional Representative
PSI CAR**

LIST OF ABBREVIATIONS:

AIDS	Acquired immunodeficiency syndrome
HIV	Human Immunodeficiency Virus
MARPs	Most At Risk Populations
NGO	Non-Governmental Organization
OAM	Opportunity, Ability and Motivation
PSI/CAR	Population Services International/Central Asian Republics
SS	Sentinel Surveillance
STI	Sexually Transmitted Infection
SW	Sex Workers
TB	Tuberculosis
TLS	Time-location sampling
TRaC	Tracking Results Continuously
VCT	Voluntary Counseling and Testing
VDT	Venue-Date-Times
USAID	United States Agency for International Development

SUMMARY

I. Executive Summary

Under the USAID Dialogue on HIV and TB Project in Central Asia, the following TRaC study on sex workers (SWs) focuses on monitoring key behaviors of interest among this risk group (condom use and utilization of voluntary counseling and HIV testing).

The present study shows a high amount of condom use among SWs in all countries, but condom use with regular partners is low. Less SWs report having casual partners compared to other partner types, and they also report less condom use during oral sex compared to vaginal and/or anal sex. SWs have more negative attitudes towards condom use with trusted partners and most feel that condoms should only be used with clients. Programs should focus on promoting the concept that condoms should be used with all partners for vaginal and/or anal sex and oral sex, not just with clients. Access to condoms among SWs should also be diversified, where most SWs currently purchase condoms at pharmacies or obtain them through their administrators/female pimps.

While uptake of VCT is high, there are still some sex workers who have not tested. Programs should continue to work to expand access of SWs to VCT services, while also continuing to encourage these service-providers to provide counseling and referrals to other services. Not all SWs chose to disclose their HIV status or the results of their last HIV test; when they did choose to disclose their results, they were selective in choosing the recipient of this information. Many SWs chose to disclose the results of their last test to a friend or acquaintance as opposed to a doctor or health specialist, despite indicating that they are confident they are able to disclose their HIV status to do so. SWs were also more hesitant to disclose their HIV status to family members as well as their sexual partners. Programs should focus on reducing the fear of stigmatization when sharing their HIV status by continuing to build a social support network for SWs that includes family members and friends. Programs should also emphasize to SWs the importance of sharing their HIV status and test results with a doctor/health specialist, and can enable them to do so by communicating to doctors the importance of demonstrating understanding and giving quality care towards this particular risk group.

Currently, most SWs plan to undergo HIV testing in the future, but not with their partners. It is important that SWs understand the importance of having their partners test as well, which opens the possibility of programs focusing more on promoting couples testing (testing with regular partners). Some SWs indicated the presence of STI symptoms and having had sought medical services for these symptoms. STI treatment locations should be expanded to ensure that there are more testing locations that SWs will be able to access, and that these testing locations continue to offer quality services (i.e., avoid stigmatizing clients). Finally, programs should continue to work to improve HIV-related knowledge

among SWs, focusing specifically on improving their knowledge of HIV transmission routes.

II. Background & Research Objectives:

The HIV & AIDS epidemic in Eastern Europe and Central Asia is described as one of the fastest growing HIV & AIDS epidemics in the world. Annual numbers of newly reported HIV diagnoses are rising in the Central Asia Republics (CAR), where the number of people living with HIV in Eastern Europe and CAR has almost tripled since 2000, and has reached an estimated total of 1.4 million in 2009.¹ The exception is Turkmenistan, which reports zero HIV cases.

The number of SWs in Eastern Europe and Central Asia countries has also risen dramatically in recent history. This is due to social, economic and political changes that have led many to turn to sex work as a means of income. Levels of sexually transmitted infections are high, suggesting that few SWs are practicing safe sex. This raises concerns that HIV could become more common among SWs in coming years.²

Table 1: HIV & AIDS in Central Asia among SWs

	Kazakhstan	Kyrgyzstan	Tajikistan
Estimated Population of SWs	5,100 (Almaty)*	1,817 (Chui oblast)***	6,000 (Dushanbe) *****
HIV Prevalence among SWs	1.5% (all regions)**	3.5% (all regions)****	4.4% (all regions) *****

Notes:

* Kazakhstan rapid assistance 2009

** Kazakhstan UNAIDS country narrative report 2012

*** Kyrgyzstan sentinel surveillance survey 2009

**** Kyrgyzstan UNAIDS country narrative report 2012

***** NGO Marvorid estimation

***** Tajikistan UNAIDS country narrative report 2012

This TRaC study aims to answer fundamental questions related to monitoring the SW population in the CAR region. First, this study seeks to monitor key behaviors of interest among SWs, including consistent condom use, the utilization of STI services, and the utilization of voluntary counseling and HIV testing (VCT). Second, this study focuses on understanding how differences in opportunity, ability, and motivation (OAM) factors contribute to behaviors of interest among SWs in Central Asia.

¹ UNAIDS, 2010

² UNAIDS, 2006

III. Program Description:

With one of the fastest growing HIV & AIDS epidemics in the world, the USAID Dialogue on HIV and TB Project targets most-at-risk populations (MARPs) likely to contract or transmit HIV: PWID (people who inject drugs), SWs (sex workers), migrants, MSM (men who have sex with men), prisoners, and PLWH (people living with HIV). Risk for TB infection is higher among PWID, prisoners and migrants, but is particularly dangerous for PLWH.

Addressing these health issues, PSI/CAR is implementing a 5-year USAID Dialogue on HIV and TB Project targeting populations most-at-risk for contracting HIV and TB in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. The program began in September 30, 2009. The purpose of the project is to reduce risk behaviors associated with HIV transmission and to increase the utilization of HIV and TB testing and treatment services among MARPs. The USAID Dialogue on HIV and TB Project is working towards this goal through a combination of evidence-based activities: inter-personal communications (outreach, mini sessions, long-format sessions and “edutainment” events); informational-educational communications (informational booklets and leaflets); distribution of condoms and needles/syringes; referrals for HIV testing, TB testing and drug treatment; social escorts for testing; and case management for TB treatment. These activities are part of a high coverage social marketing strategy to increase access to and availability of condoms as well as TB treatment.

Activities: The USAID Dialogue on HIV and TB Project in Central Asia provides technical assistance, training, and direct outreach services in order to increase access to quality HIV prevention and TB treatment services for those most at risk of contracting HIV and TB. The Project is implemented in the Central Asian republics of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. The Project employs outreach prevention models, proven effective under previous regional projects and deemed best practices, and adapts them to current program needs for each target population. Each model is composed of Targeted Outreach Package of Services. Outreach activities range from peer education and client management to social escorts who take clients to HIV and TB services, complementing rather than duplicating existing services.

METHODOLOGY

I. Study Population and Inclusion Criteria:

A total of 302 SW participants (N=302) were recruited from three sites in the Central Asian Republics. These sites were in Almaty (in Kazakhstan); Chui Oblast (in Kyrgyzstan); and Dushanbe (in Tajikistan). Participants were recruited based on the following criteria:

- 18 years of age or older
- Provided sexual services in exchange for money or any other type of reimbursement within the past month
- Did not participate in a survey about HIV in the last 2 months
- Is not a peer educator/outreach worker/NGO staff working with SWs or on HIV-related issues
- Voluntary consent was given to participate in the survey

The distribution of SW respondents according to each country is shown in **Table 2**. Data collection occurred from March to June 2012. The study design was reviewed and approved by the PSI Research Ethical Board and the National Ethical Commission in Kazakhstan.

Table 2: Distribution of SW participants by country

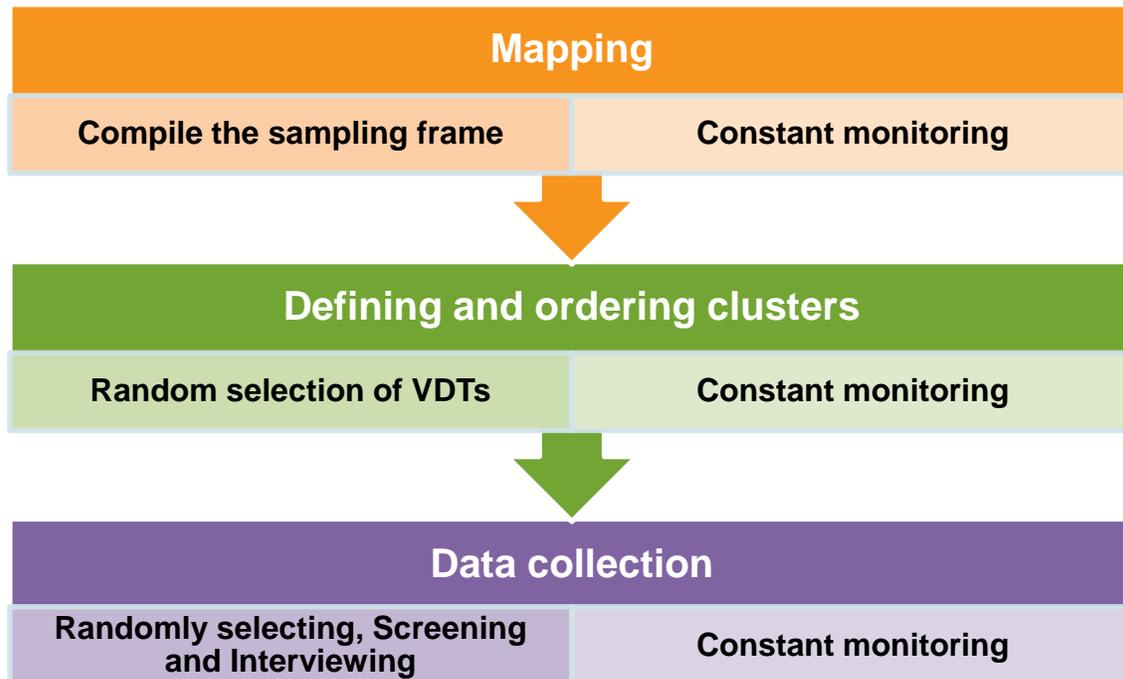
Country	SW (N = 302)
Kazakhstan	100
Kyrgyzstan	102
Tajikistan	100

II. Sampling:

Time location sampling (TLS) was utilized in this survey as there is no complete census data for the SW population at the target sites. Accordingly, the target population can be reached at discrete sites. In Kazakhstan and Kyrgyzstan the locations for sampling were venues (i.e., hotels, saunas) while in Tajikistan areas on the street were demarcated as locations for sampling. The pre-mapping of sampling sites has shown that in the majority of sites there were very few SWs at each location and that there was little variation depending on time of day (women working off-peak hours were also working peak hours). Therefore, the participants in these venues were recruited by interviewers during the busiest days during the week and the busiest times during those days. Venues or locations were randomly ordered into 2-hour slots on a calendar called venue-date-times (VDTs). The research team recruited all eligible SWs to participate during that particular VDT.

There were a total of 12 VDTs in Kazakhstan (4 to 17 SWs were interviewed per VDT), 14 VDTs in Kyrgyzstan (3 to 13 SWs interviewed per VDT) and 9 VDTs in Tajikistan (8 to 14 SWs were interviewed per VDT).

Figure 1: SW data collection process



III. Sample Size Calculations and Achieved Samples:

Sample size calculations are set at the maximum that is feasible to collect with the time and resources available. Results of the baseline TRaC study conducted in Year One of the project (2010) showed some unexpectedly high levels in baseline indicators. Unrealistically large sample sizes would be required to show statistically significant changes in most of the performance monitoring plan (PMP) indicators from Year One to Year Three. It will not be possible to deliver these samples for this study. As a result, this survey will be a stand-alone study, for the purpose of providing interim estimates of key behavioral indicators.

A total sample of 302 respondents were drawn from across sample sites in Kazakhstan, Kyrgyzstan, and Tajikistan, taking 100 respondents from each sample site (with 2 extra respondents in Kyrgyzstan). A sample of 300 cases should provide aggregated estimates that are accurate within a maximum of +/- 6%. Samples from each country will be accurate to within a maximum of +/-10%. These estimates assume point estimates of 50% with a 95% confidence level.

IV. Analysis Conducted:

Analysis of data presented in this report was conducted using Statistical Package for the Social Sciences (SPSS) (Version 18). The population size of SWs in Kazakhstan that was used for the weighting was based on rapid assistance estimation 2009. The population size of SWs in Kyrgyzstan weighting was based on the 2009 sentinel surveillance survey. The population size of SWs in Tajikistan that was used for the weighting is based on the data from the NGO “Marvorid”.

V. Study Limitations:

As with any survey requiring self-reporting, social desirability bias can be a limitation, especially given that the data collectors of this survey were also outreach workers. In this survey, personal questions about drug use, sexual activity, and other sensitive topics could all have been affected by this particular bias.

One limitation to the TLS methodology is that it is more feasible in public locations (i.e., streets or parks) and is not as effective in gathering data among hard-to-reach SWs (i.e., TLS requires access to venues such as hotels or saunas, which can be more difficult to achieve). TLS also makes it more difficult to adhere to random selection methods. The fact that outreach workers acted as data collectors also allows for the possibility that many of the SWs used in the present study may have also been those who were exposed to the program—it is possible that data collectors were more likely to approach SWs they recognized from their program activities.

SURVEY FINDINGS

This section analyzes the **Monitoring Data** taken from 2012 survey of SW respondents beginning with the basic demographic profile of the participants. The Monitoring Data is separated into two subsections, A) consistent condom use and B) VCT service utilization. Data is either presented by separate countries (Kazakhstan, Kyrgyzstan, and Tajikistan) or in an aggregated form. A summary of the findings and recommendations is included at the end of the section.

I. Demographic Profile of SWs Respondents:

The demographic profile of the SW respondents in the 2012 survey is shown in **Table 3**. The mean age of SW respondents in Kazakhstan and Kyrgyzstan was about 25 years old, while the sample population was slightly older in Tajikistan at 30 years old. The majority of respondents had obtained some primary or secondary education (with the exception of Kazakhstan, where most SWs had obtained secondary-level education or a college or university education). Most

respondents were not married or were widowed/divorced/separated, and about 61% of SWs across all three countries had children.

Table 3: Demographic characteristics of SW respondents in Kazakhstan, Kyrgyzstan, and Tajikistan, 2012

POPULATION CHARACTERISTICS	Total 2012 N=302	Kazakhstan 2012 N=100	Kyrgyzstan 2012 N=102	Tajikistan 2012 N=100
Age (mean)	26.76	24.62	24.82	29.7
Having children	60.8%	46.0%	46.1%	77.8%
Number of children (mean)	1.72	1.25	1.74	2.11
Level of Education Attained				
None	6.7%	2.0%	8.8%	10.0%
Primary	26.6%	3.0%	15.7%	50.0%
Secondary (up to 11 th grade)	48.4%	61.6%	58.8%	34.0%
Professional technical school	4.2%	4.0%	8.8%	3.0%
College	6.6%	14.1%	3.9%	1.0%
University	7.5%	15.2%	3.9%	2.0%
Marital Status				
Not married (never married)	34.8%	50.0%	49.5%	17.3%
Married/cohabiting	13.7%	4.0%	15.5%	21.4%
Widowed/divorced/separated	51.5%	46.0%	35.0%	61.2%
Nationality				
Kazakh	23.4%	56.0%	5.9%	1.0%
Kyrgyz	10.0%	11.0%	40.2%	0.0%
Uzbek	22.8%	9.0%	5.9%	39.6%
Tajik	26.6%	1.0%	0.0%	56.4%
Russian	10.9%	12.0%	37.3%	2.0%
Other	6.3%	11.0%	10.8%	1.0%

II. Monitoring Data:

Full Monitoring Tables can be found in **Annex A**.

A. Consistent Condom Use

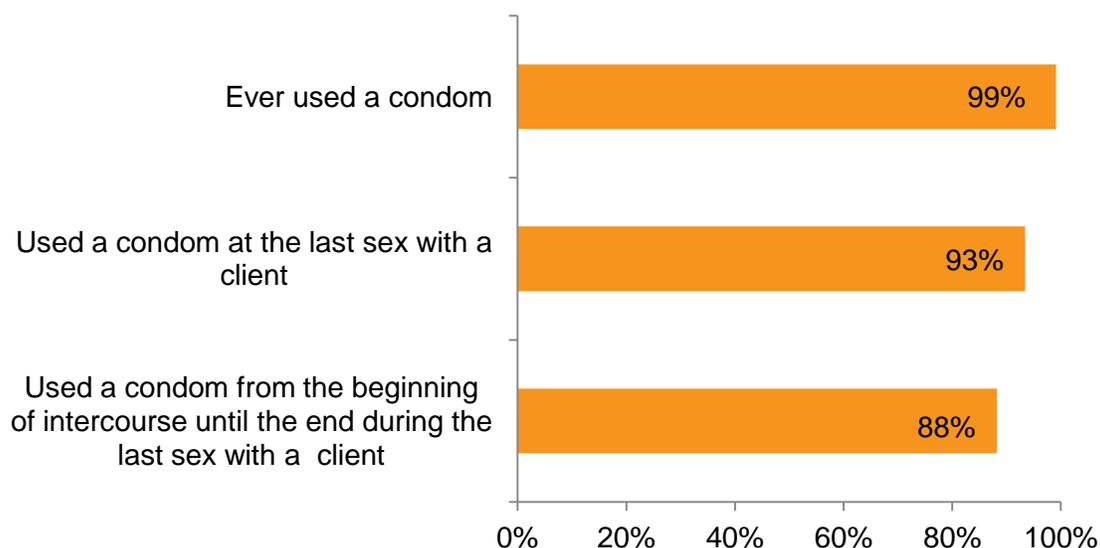
The first major behavior of interest for this study is consistent condom use among SWs.³ **Figure 2** shows the results related to overall condom use across all countries. **Figures 3a-3c** shows consistent condom use broken down by partner type.⁴ Disaggregating condom use by partner types may help determine whether SWs are using condoms only with some partners and not others. **Figure 4** examines attitudes of SWs towards condom use with commercial, trusted, and regular partners. By examining these attitudes of SWs, it is possible to understand some of the reasons why SWs may be using condoms with some partners but not with others. Finally, **Figure 5** shows where SWs in each country purchase their condoms, which provides more insight on the condom market as well as SWs' access to condoms.

Overall condom use across all countries appears to be relatively high, as is shown in **Figure 2**. Ninety-nine percent of SWs report having used a condom before, 93% report having used a condom at last sex with a client, and 88% report having used a condom from the beginning of intercourse until the end during the last time they had sex with a client.

³ The indicator for consistent condom use is always using a condom during vaginal and/or anal sex with all partner(s) in the last month

⁴ Partner types are broken down as “regular”, “casual”, and “commercial” partners. Regular partners are defined as cohabiting or non-cohabiting sexual partners and someone who is considered to be a main sexual partner. A casual partner is someone with whom the individual has had sex but with whom they did not feel committed or did not know very well. They did not pay the casual partner and nor did these partners pay the individual to have sex. A commercial partner is defined as someone with whom the individual has paid money or other items for sex.

Figure 2: Condom use indicators among SWs across all countries (N=302)



Figures 3a-3c focus on consistent condom use with regular, casual, and commercial partners during vaginal and/or anal sex as well as oral sex in each country. The results indicate there are differences in condom use depending on partner type, where condom use for vaginal and/or anal sex with regular partners (32% in Kazakhstan, 56% in Kyrgyzstan, and 52% in Tajikistan) is consistently lower compared to the other two partner types. Condom use with regular partners during oral sex is also consistently lower (57% in Kazakhstan, 56% in Kyrgyzstan, and 6% in Tajikistan). Tajikistan in particular reports some of the lowest condom use with all three partner types (6% for regular partners, 9% for casual partners, and 17% for commercial partners).

In all countries, fewer respondents reported having had vaginal and/or anal sex with casual partners compared to other partner types (13% in Kazakhstan, 21% in Kyrgyzstan, and 57% in Tajikistan).⁵ It is also important to note that the number of SWs who reported engaging in oral sex was quite low compared to those engaging in vaginal and/or anal sex. In all countries, 68% of SWs indicated having had vaginal and/or anal sex with regular partners in the past month, while only 22% of SWs indicated having had oral sex with their regular partner(s) in the past month.⁶

⁵ Data can be found in Annex A.

⁶ Data can be found in Annex A.

Figure 3a: Consistent condom use (%) for vaginal/anal and oral sex with partners among SWs in Kazakhstan, 2012

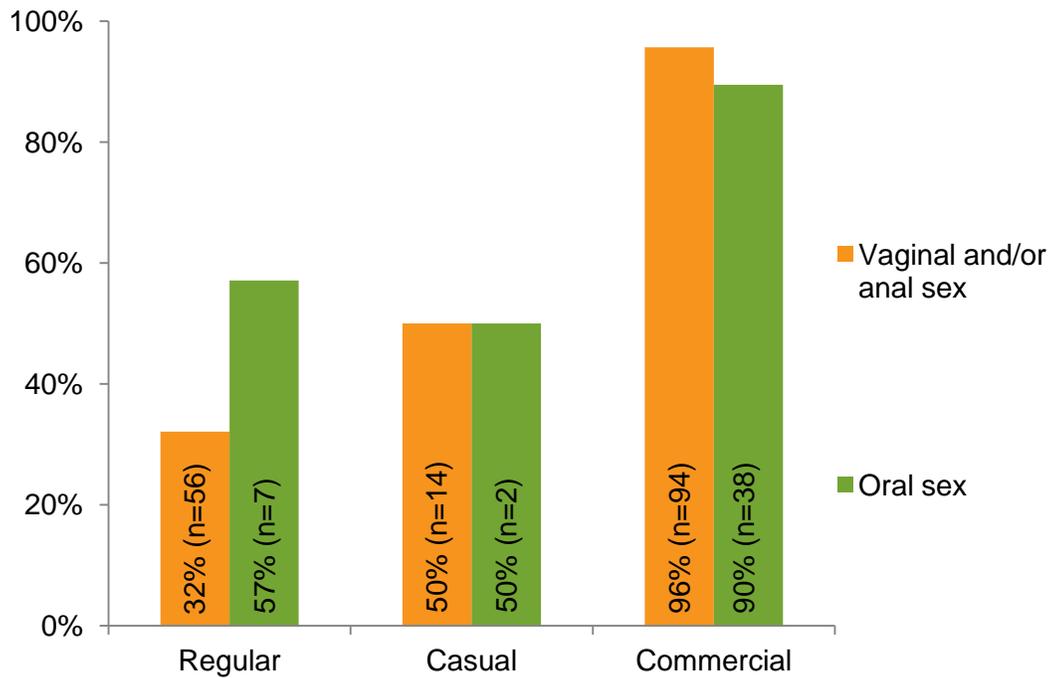


Figure 3b: Consistent condom use (%) for vaginal/anal and oral sex with partners among SWs in Kyrgyzstan, 2012

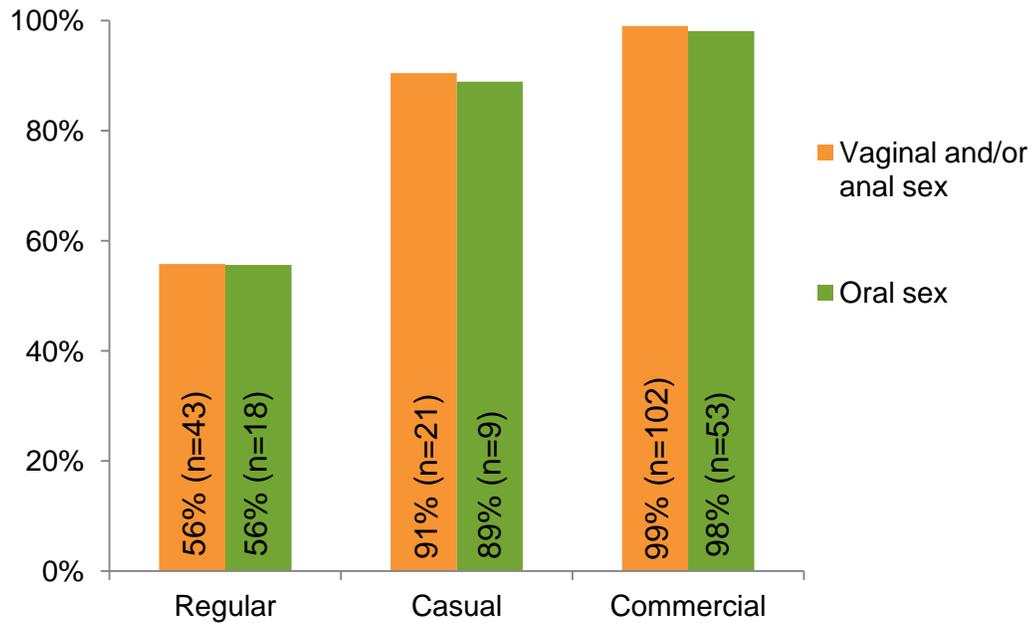


Figure 3c: Consistent condom use (%) for vaginal/anal and oral sex with partners among SWs in Tajikistan, 2012

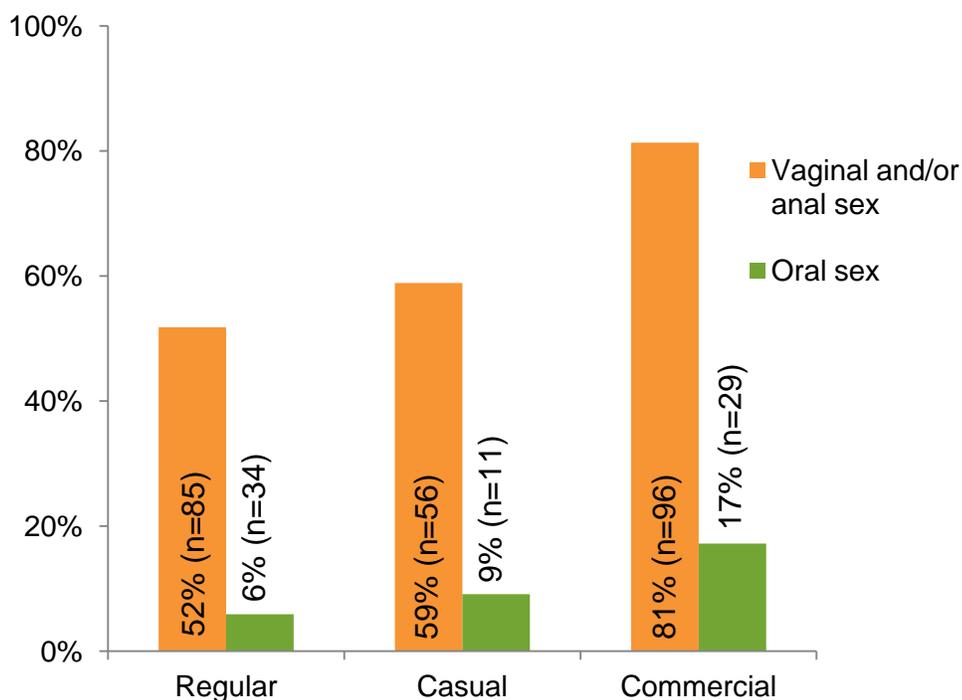
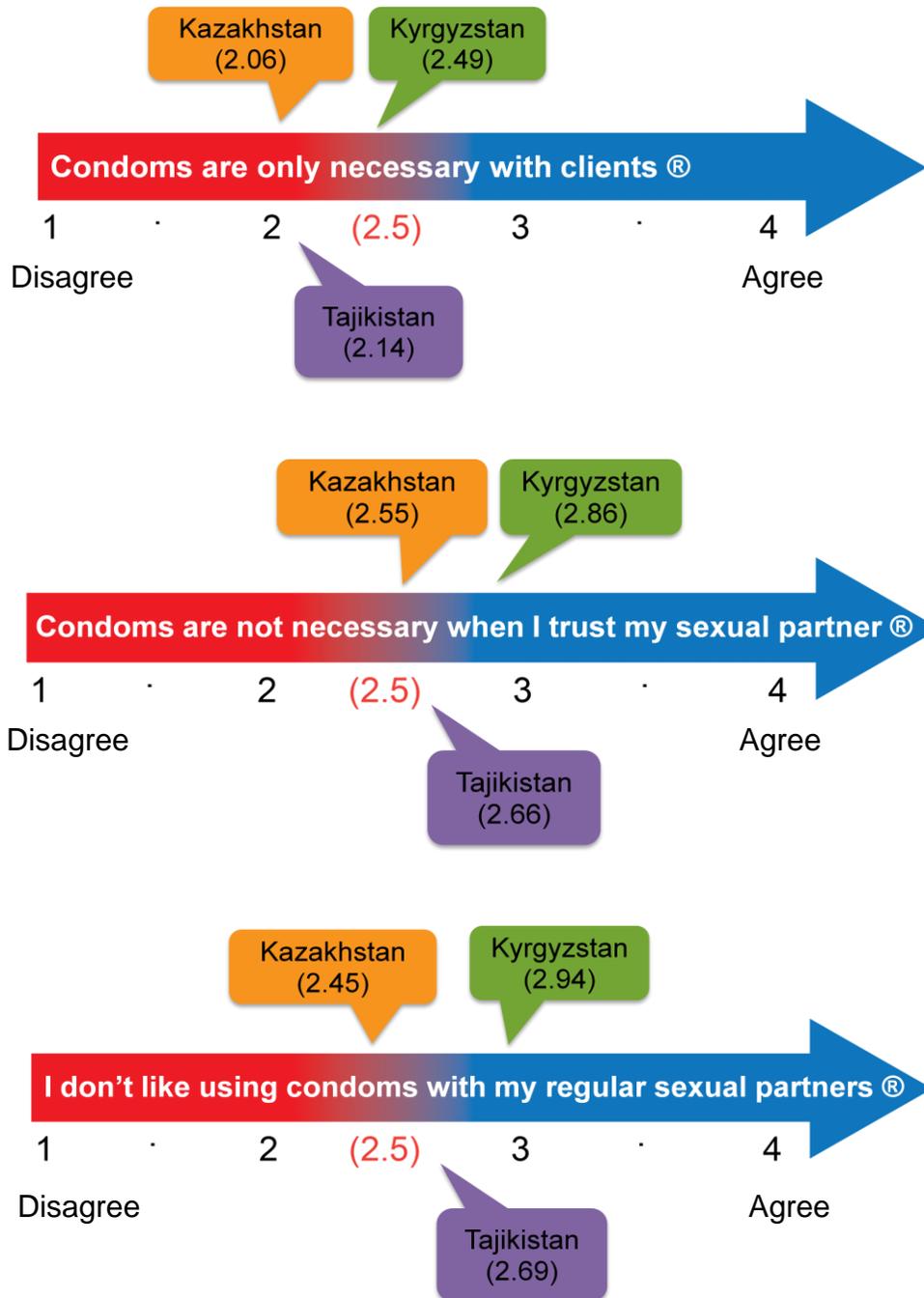


Figure 4 examines attitudes towards condom use among SWs in all countries as measured on a Likert scale.⁷ On average, SWs agree that they feel that condoms are only necessary with commercial clients. Although SWs on average did not agree that condoms are not necessary when they trust their sexual partner and SWs on average also did not agree that they don't like using condoms with their regular partners, these indicators are still relatively low. Positive attitudes towards condom use overall are the highest in Kyrgyzstan and the lowest in Kazakhstan.

⁷ For the majority of OAM (Opportunity, Ability and Motivation) factors the scale of 1 through 4 is used, unless otherwise noted. In this scale: 1 is completely disagree, 2 – disagree, 3 – agree, and 4 – completely agree. Mean scores are presented. A mean score of below 2.5 indicates that the majority disagrees with the statement and a mean score of higher than 2.5 indicates that the majority agrees. A mean score of 2.5 indicates that overall respondents neither agree nor disagree with the statement.

Figure 4: Attitudes toward condom use among SWs in Kazakhstan (n=100), Kyrgyzstan (n=102), and Tajikistan (n=100), 2012⁸

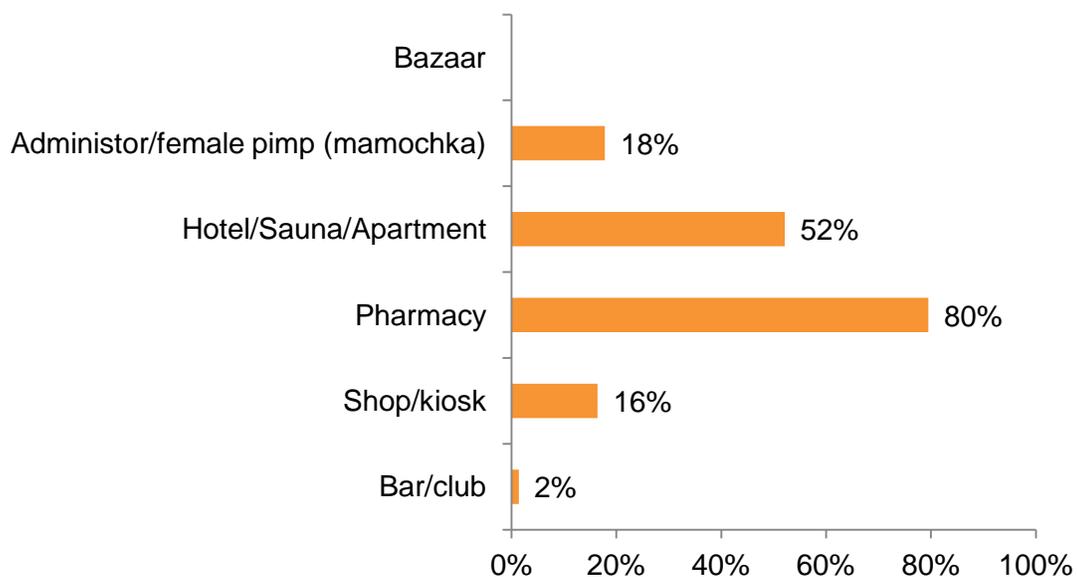


⁸ ® - Reverse-coded items. Scores for these items have been reversed so that a high score = positive/desired response. Wording of these items has not been reversed and they read as they were presented to the respondents. For knowledge-based items, the scores for items have been reversed where the item is factually incorrect so the % presented is those who knew the correct answer.

Access to condoms is an important factor in condom use among SWs. In all countries, most SWs indicate that they have received free condoms before (87% in Kazakhstan, 83% in Kyrgyzstan, and 100% in Tajikistan).⁹ **Figures 5a-5c** highlight where SWs most often purchase their condoms in each country. The place where condoms are most often purchased is a pharmacy (80% in Kazakhstan, 75% in Kyrgyzstan, and 99% in Tajikistan). SWs also reported buying condoms at a hotel/sauna/apartment (52% in Kazakhstan, 27% in Kyrgyzstan, 28% in Tajikistan).¹⁰ SWs in Kazakhstan and Kyrgyzstan also reported purchasing condoms from their administrator or female pimp (18% and 27%, respectively), as well as at a shop/kiosk (16% and 30%, respectively). SWs in Kyrgyzstan also reported buying condoms at the bazaar (19%).

It should be noted that few SW respondents in Tajikistan reported buying condoms at places other than the pharmacy and hotel/sauna/apartment. It should also be noted that in all countries, fewer SWs reported buying condoms at a bar or club (1% in Kazakhstan, 4% in Kyrgyzstan, and 2% in Tajikistan).¹¹

Figure 5a: Where condoms are most often purchased in Kazakhstan (n=73)



⁹ Data can be found in Annex A

¹⁰ Many SWs have administrators who also work in a hotel, which may explain why many SWs in all countries purchase condoms at a hotel/sauna/apartment.

¹¹ It should be noted that most SWs who were surveyed do not work at bars and clubs, given that these are areas where less at-risk SWs work (SWs who earn a higher income), which may explain why less SW respondents in all countries indicated purchasing condoms at a bar/club.

Figure 5b: Where condoms are most often purchased in Kyrgyzstan (n=97)

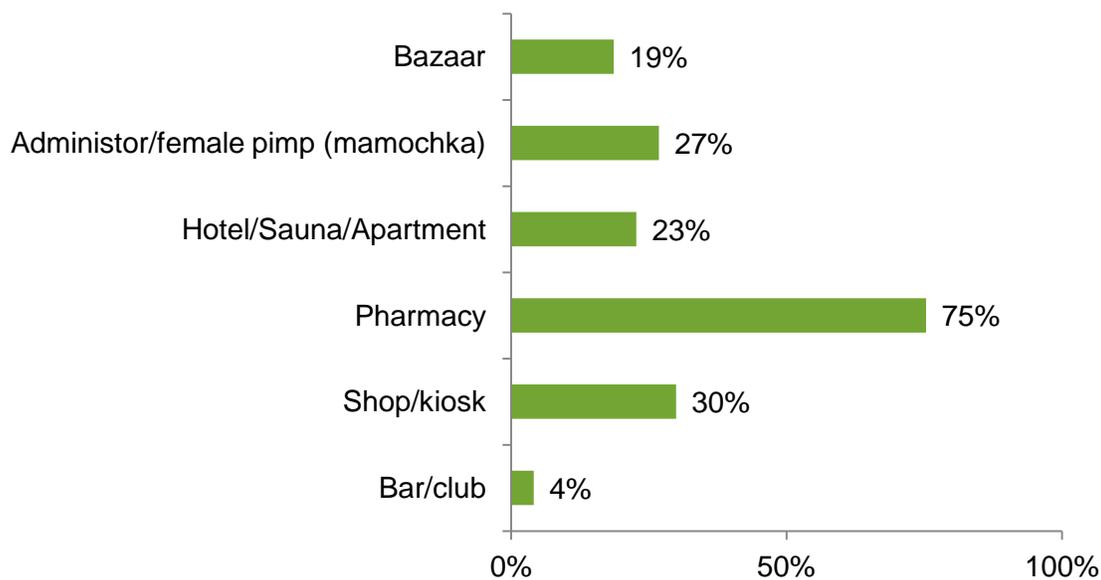
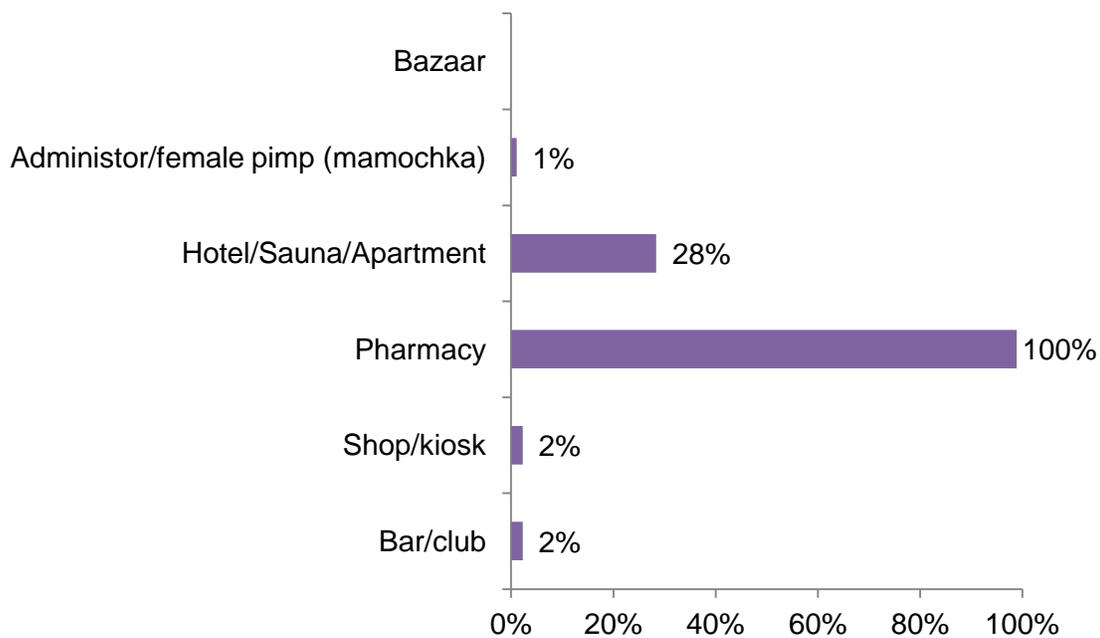


Figure 5c: Where most condoms are most often purchased in Tajikistan (n=88)



B. VCT Service Utilization

The second behavior of interest is VCT service utilization¹² among SWs in Central Asia. In this section, the results for the percentage of SWs who have been tested for HIV and received their results in the last 12 months is shown in **Figure 6**. **Figure 6a** further shows whether SW respondents received counseling either before or after their test. **Figure 6b** shows whether SWs who received testing were also referred onto other services (i.e., medical services for STI treatment, referral to a gynecologist).

In sum, these findings will help illuminate SWs' experiences related to VCT utilization. Counseling is also crucial when discussing VCT utilization as counseling can relay vital information relating to HIV transmission routes, HIV prevention, and the utilization of other health resources. **Figures 7-7b** focuses on whether SWs reveal their HIV status and to whom. SWs' intentions towards getting tested are shown in **Figure 8**.

Figures 9-9c provides information related to STIs among SWs, including their knowledge of STI symptoms and where they go for testing and treatment.

Findings related to knowledge of HIV transmission are shown in **Figures 10** and **10a**. If SWs understand transmission routes of HIV, they will be able to protect themselves from getting infected with HIV, as well as protect others from getting infected by them, should they have a positive HIV status.

Figure 6 shows the percentage of SWs who have been tested for HIV and received their results in the last 12 months. Across the region, most SW respondents had been tested and received results in the last 12 months (88% in Kazakhstan, 80% in Kyrgyzstan, and 95% in Tajikistan).

¹² The indicator for VCT utilization is being tested for HIV and receiving the results in the last 12 months.

Figure 6: Percent (%) SWs who have been tested for HIV and received results in the last 12 months, 2012

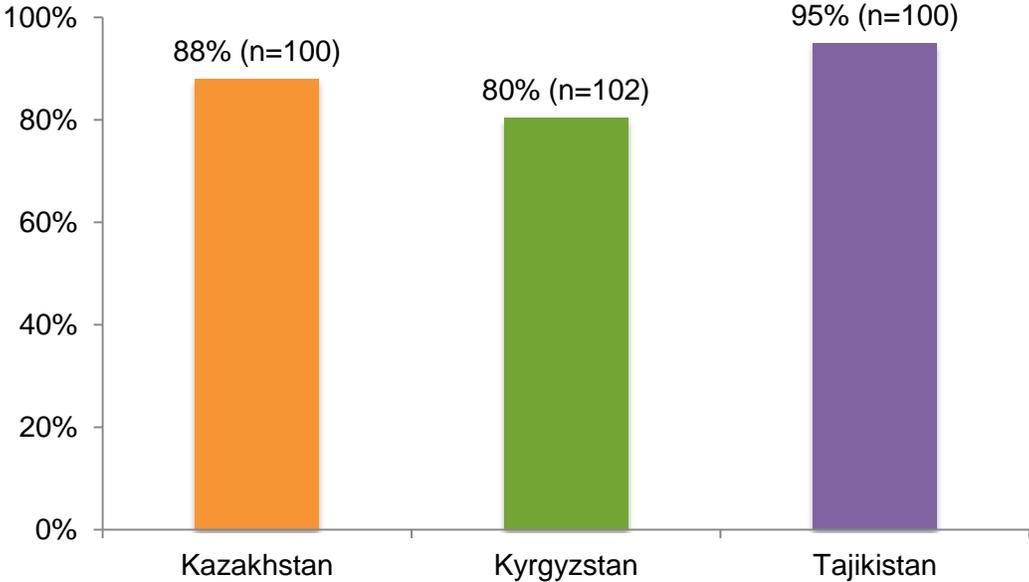


Figure 6a examines the percentage of SWs who received counseling at their testing location. In Tajikistan, almost all respondents indicated they received counseling (99%), but in Kazakhstan and Kyrgyzstan smaller percentages of SWs indicated receiving counseling (82% and 89%, respectively).

Figure 6a: Percent (%) SWs who received pre and/or post-test counseling at a testing location, 2012

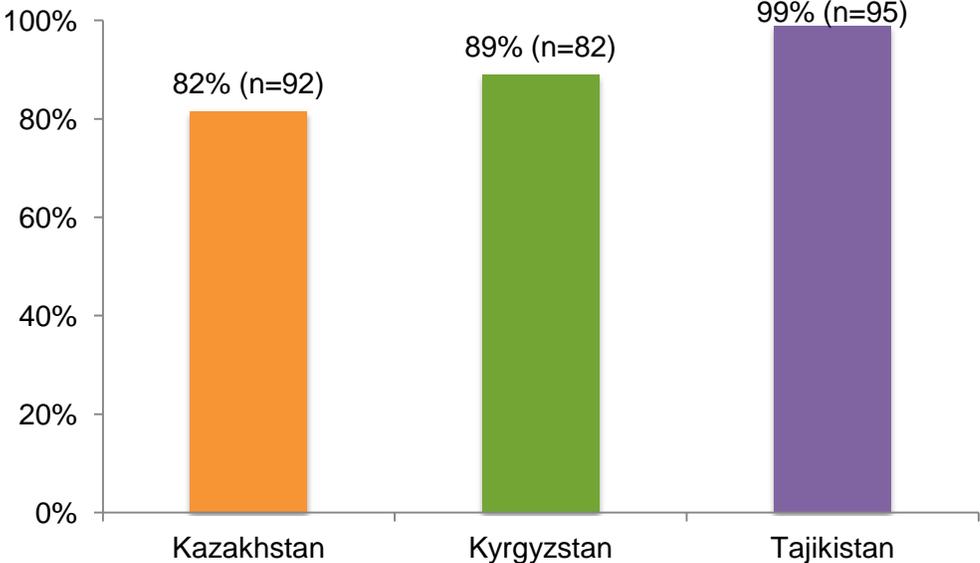


Figure 6b shows the percentage of SWs who were referred onto other services after their last HIV test. A majority of the respondents in Kyrgyzstan and Tajikistan reported having been referred onto other services (82% and 81% respectively). In Kazakhstan, however, the amount of SWs who were referred onto other services is quite low (34%).

Figure 6b: Percent (%) SWs referred to other services after the last time receiving voluntary counseling and testing (among those receiving VCT), 2012

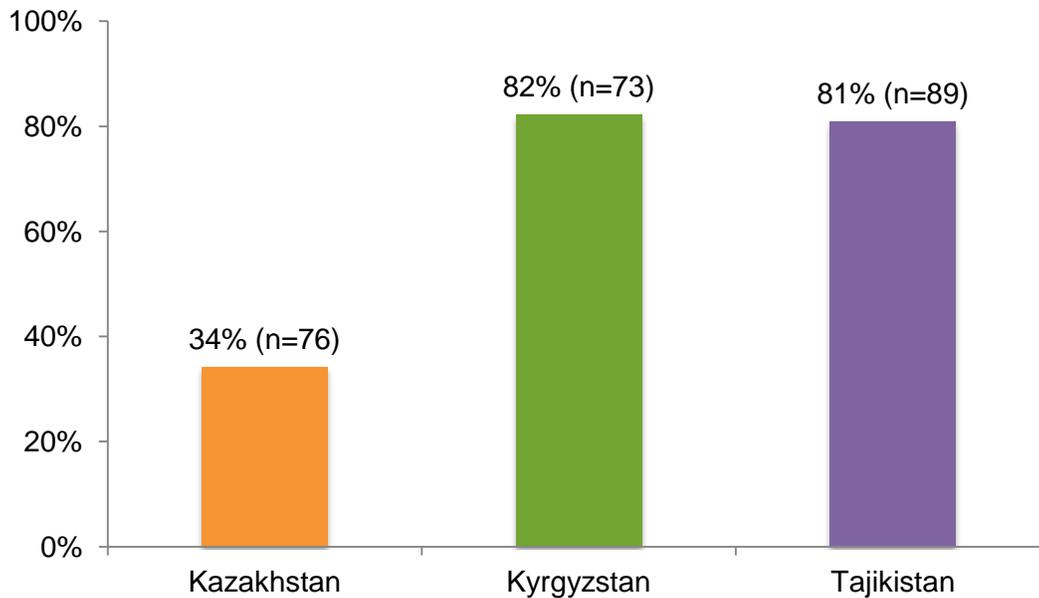


Figure 8 shows the respondents' intentions to get tested for HIV, as measured by the Likert scale. Most respondents in all countries agree that they plan on getting tested for HIV within the next three months (3.64 in Kazakhstan, 3.8 in Kyrgyzstan, and 3.53 in Tajikistan). However, when it came to getting tested with their regular partners, only SWs in Tajikistan intended to undergo couple's testing in the next three months. SW respondents in Kazakhstan and Kyrgyzstan felt more reluctant to undergo testing with their partners (2.48 and 2.0, respectively).

Figure 8: Intentions for getting tested in Kazakhstan (n=100), Kyrgyzstan (n=102), and Tajikistan (n=100), 2012

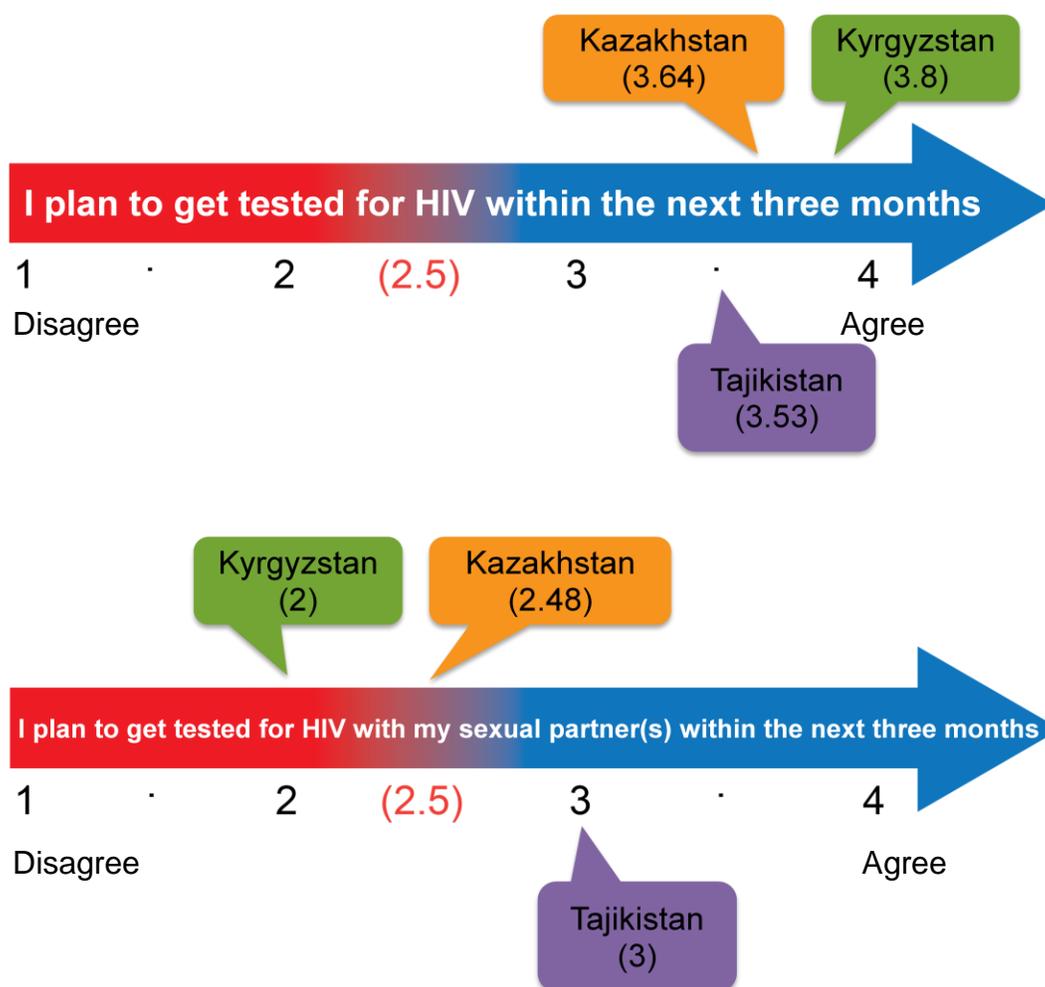


Figure 7 shows that the percentage of SWs who disclosed the results of their last HIV test was relatively high in Tajikistan (88%), but lower in Kazakhstan and Kyrgyzstan (68% and 65%, respectively).

Figure 7: Percent (%) of SWs who disclosed HIV test results of their last test, 2012

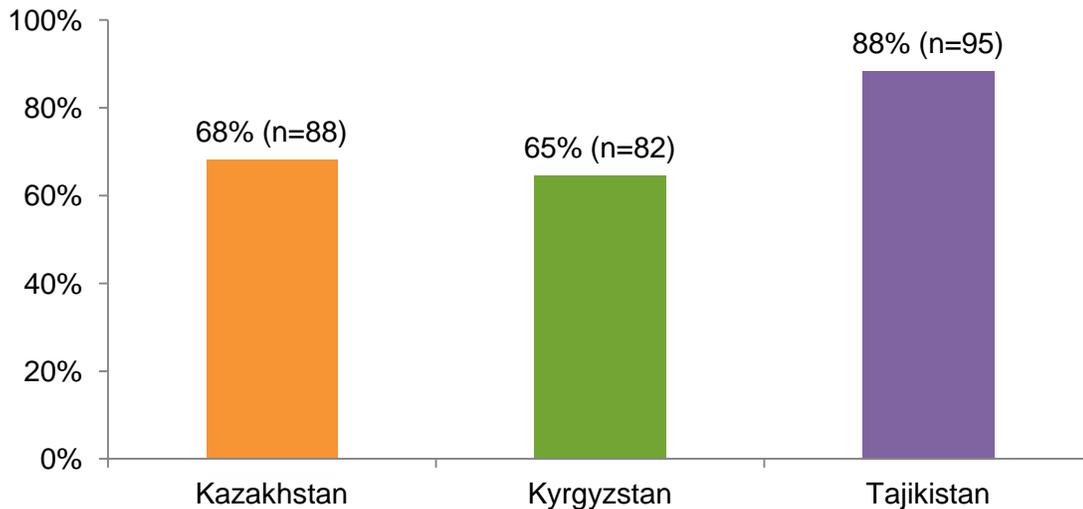
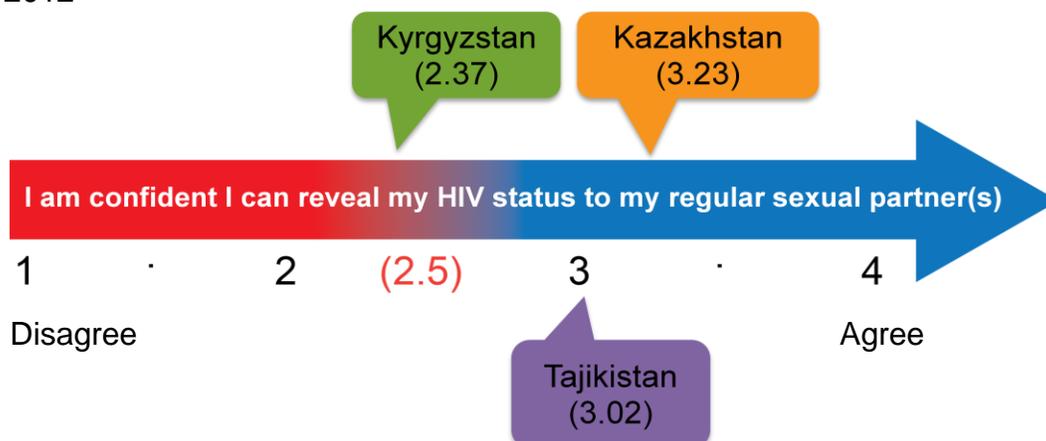


Figure 7a shows findings related to SWs' self-efficacy in disclosing their HIV status, positive or negative, as shown on a Likert scale. SWs' self-efficacy in sharing their HIV status largely depended on whom they revealed their status. With the exception of Kyrgyzstan (2.37), SWs agree that they are relatively comfortable sharing their HIV status with their regular sexual partners. In Kyrgyzstan and Tajikistan, however, SWs are not confident in sharing their status with their family members or relatives. In all countries, SWs indicated that they are confident they can reveal their status to a health specialist/doctor.

Figure 7a: Self-efficacy of disclosing HIV status (positive or negative) among SWs in Kazakhstan (n=100), Kyrgyzstan (n=102), and Tajikistan (n=100), 2012



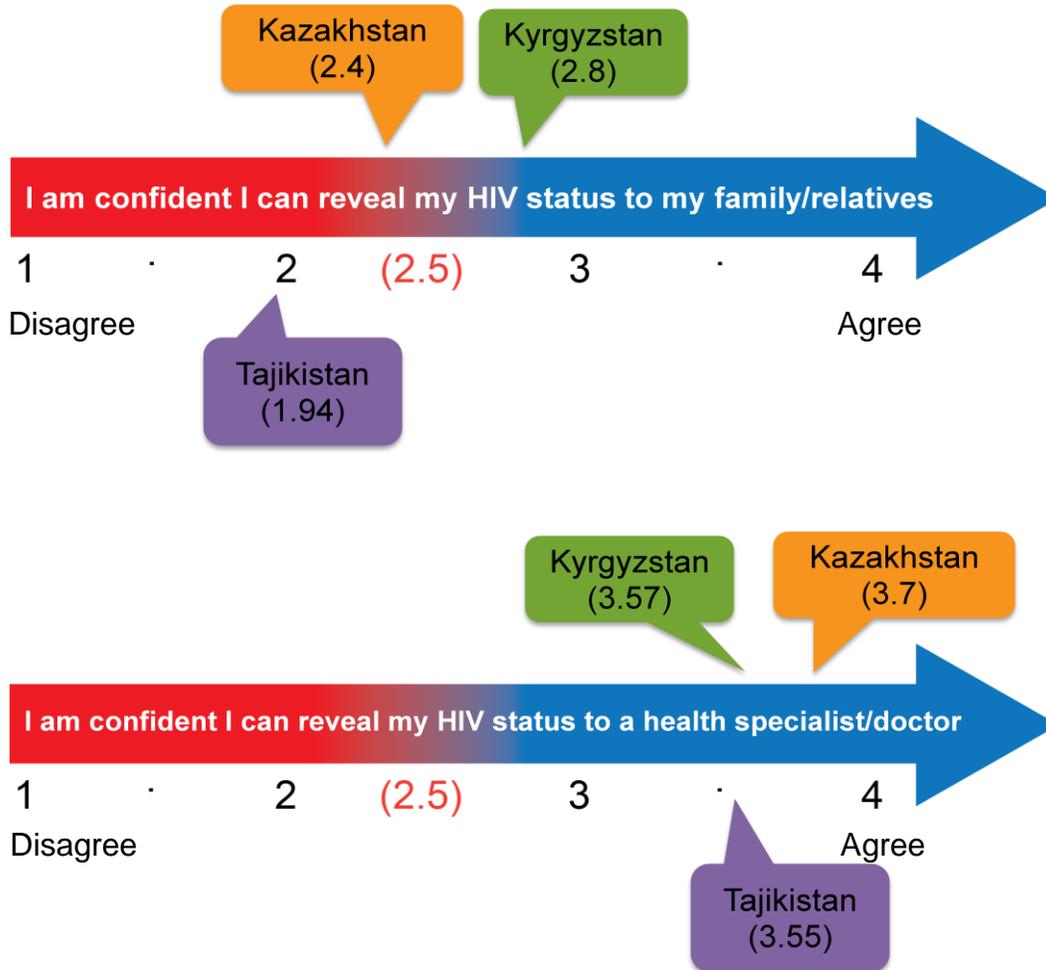


Figure 7b shows with whom SWs shared their HIV test results. In general, SW respondents in all countries felt most comfortable sharing their HIV status with a friend or acquaintance (78% in Kazakhstan, 55% in Kyrgyzstan, and 42% in Tajikistan). Smaller percentages of SWs in Kazakhstan felt comfortable divulging their status to their husband or regular sexual partner (13%) or a family member or relative (10%).

In Kyrgyzstan, besides friends and acquaintances, smaller percentages of SWs felt able to reveal their status to a family member or relative (32%), a doctor or nurse (9%), or their husband or regular sexual partner (8%).

Finally, in Tajikistan, SW respondents demonstrated the most flexibility as to who learnt of their HIV status. For example, a relatively high percentage (46%) felt able to reveal their status to their husband or regular sexual partner, the highest percentage among the three countries. Likewise, 30% of Tajik SWs felt they could reveal their HIV status to a commercial partner. The respondents also felt

they could reveal their status to a doctor/nurse or a social worker (37% and 31%, respectively). Only 8% of Tajik respondents felt comfortable divulging their status to a family member or relative and only 12% believed they could do the same with a casual sexual partner.

Figure 7b: To whom did you disclose the results of your last test, all countries, 2012

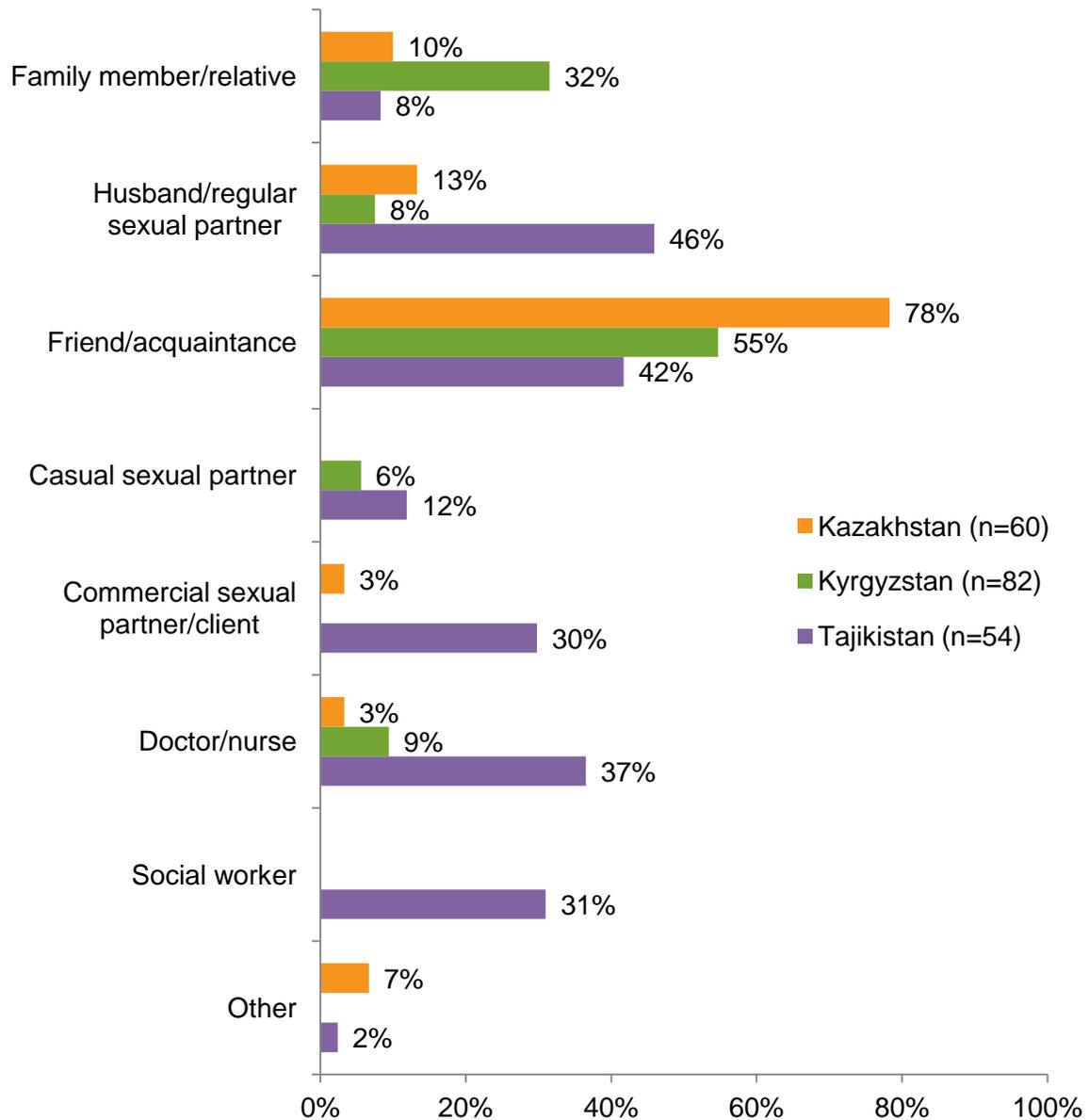
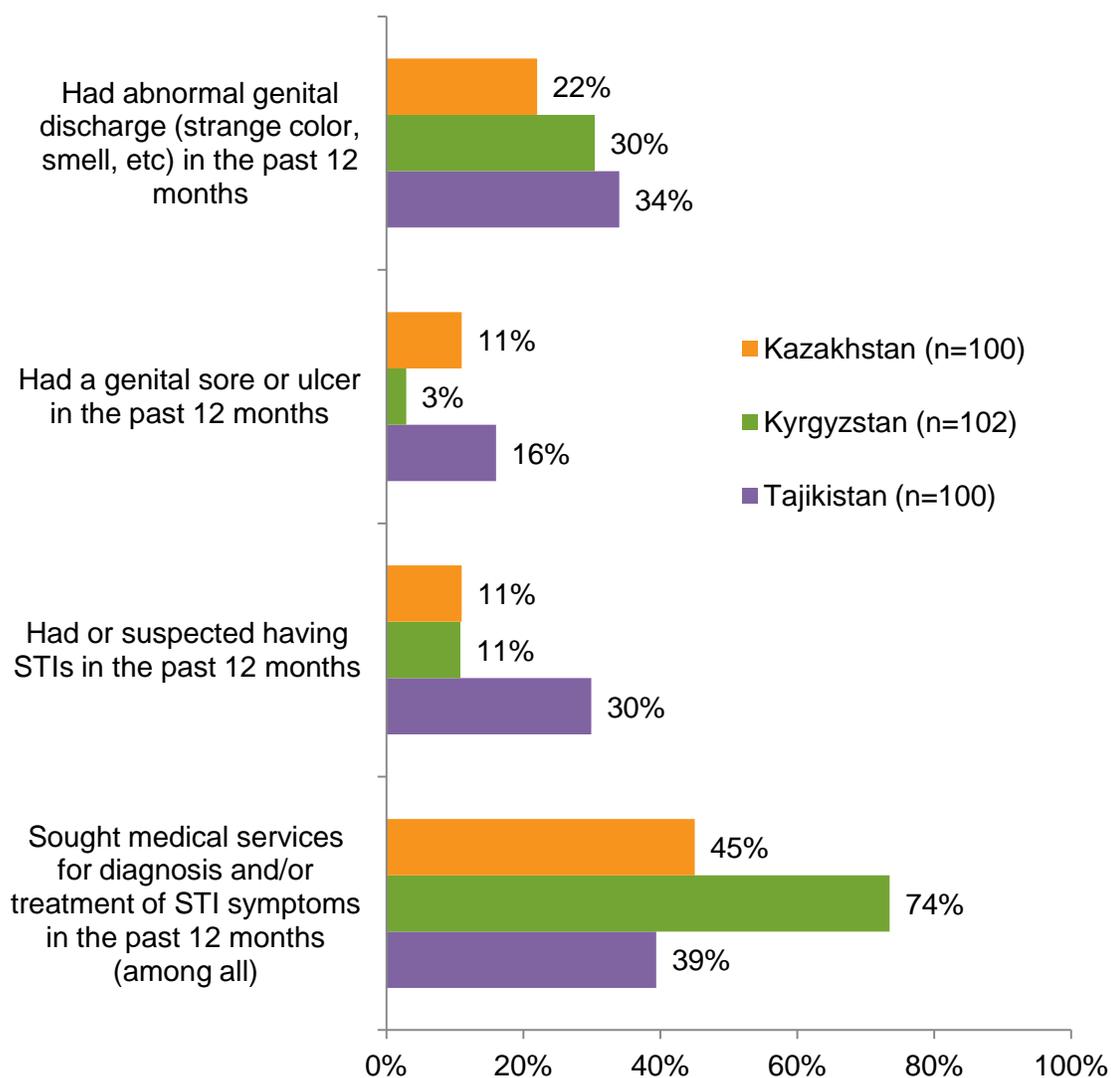


Figure 9 presents findings related to STIs among SWs, such as the presence of symptoms and seeking treatment. Small but significant percentages of SW respondents in all countries reported symptoms of STIs in the past 12 months. Similar percentages of SWs suspected they had an STI in the last 12 months. Most importantly, less than half of SW respondents in Kazakhstan and Kyrgyzstan sought treatment for STI symptoms. Tajikistan registered a slightly more positive percentage, with 74% of respondents seeking treatment for an STI in the last 12 months.

Figure 9: STIs among SWs in all countries, 2012



Figures 9a-9c show where SWs commonly went for STI diagnosis or treatment in the last 12 months. In Kazakhstan, just under two-thirds of SWs went to a government hospital or clinic (64%) for treatment. Just under one-third sought treatment at a private clinic (28%). In Kyrgyzstan SWs visit the government hospitals/clinics (22%), private clinics (34%), and family medicine centers (33%). In Tajikistan the places that SWs go for treatment is more diverse, but most go to the reproductive health center (25%), family medicine center (24%), or a friendly cabinet (17%).

Figure 9a: Places where SWs went for diagnosis and/or treatment of STI symptoms in the past 12 months, Kazakhstan (n=100), 2012

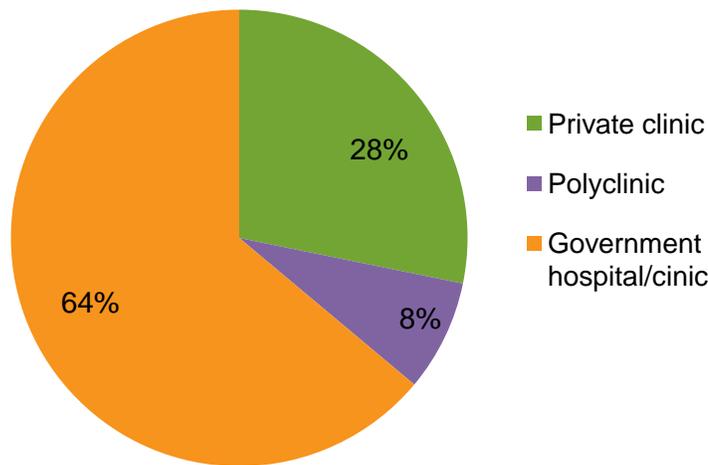


Figure 9b: Places where SWs went for diagnosis and/or treatment of STI symptoms in the past 12 months, Kyrgyzstan (n=102), 2012

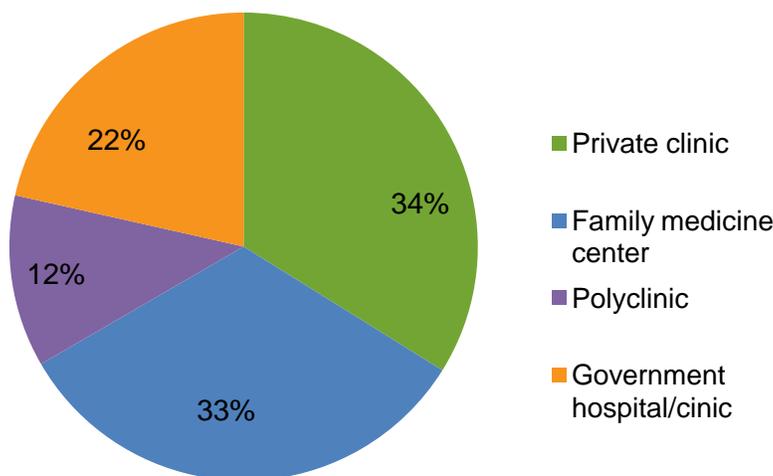
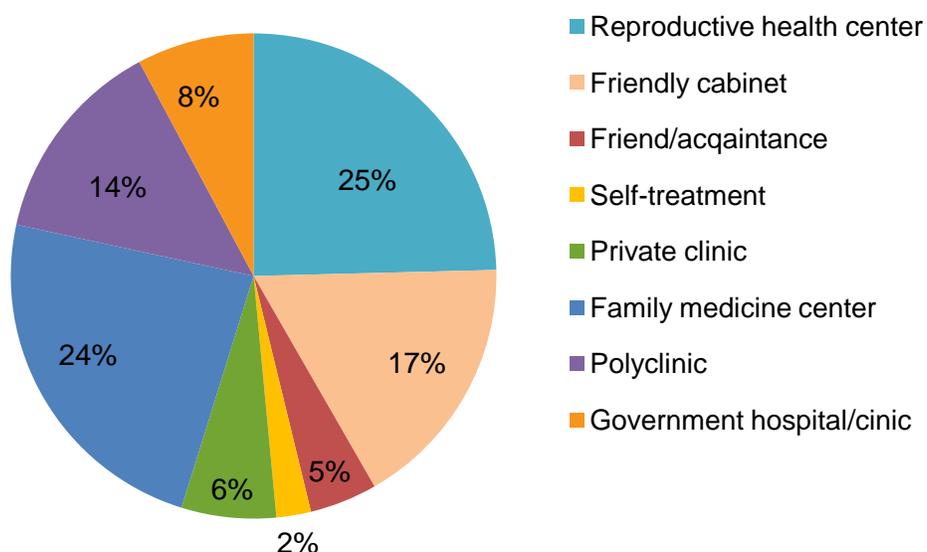


Figure 9c: Places where SWs went for diagnosis and/or treatment of STI symptoms in the past 12 months, Tajikistan (n=100), 2012



Figures 10 and 10a relate to knowledge of HIV among SWs. Most SWs in Kyrgyzstan and Tajikistan have a high knowledge of HIV transmission routes¹³ (86% and 83%, respectively). This indicator was relatively low in Kazakhstan where only 55% of SWs had high knowledge of HIV.

Knowledge of specific HIV transmission routes is also relatively low in some countries. In Kazakhstan, only 68% of respondents understand that HIV can be acquired from a single sex act; only 66% understand that HIV cannot be transmitted through kissing, and only 48% know that even a healthy-looking person can be infected with HIV. In Kazakhstan and Kyrgyzstan, a low percentage of SWs understand that HIV cannot be transmitted through food or sharing eating utensils with a HIV-infected individual (51% and 54%, respectively). A low percentage of SWs also understand that HIV cannot be transmitted through the bite of a mosquito (50% and 54%, respectively).

¹³ “High” knowledge is defined as SWs knowing 8 or more items related to HIV transmission routes.

Figure 10: Percentage of SWs with a “high” knowledge of HIV transmission routes, 2012

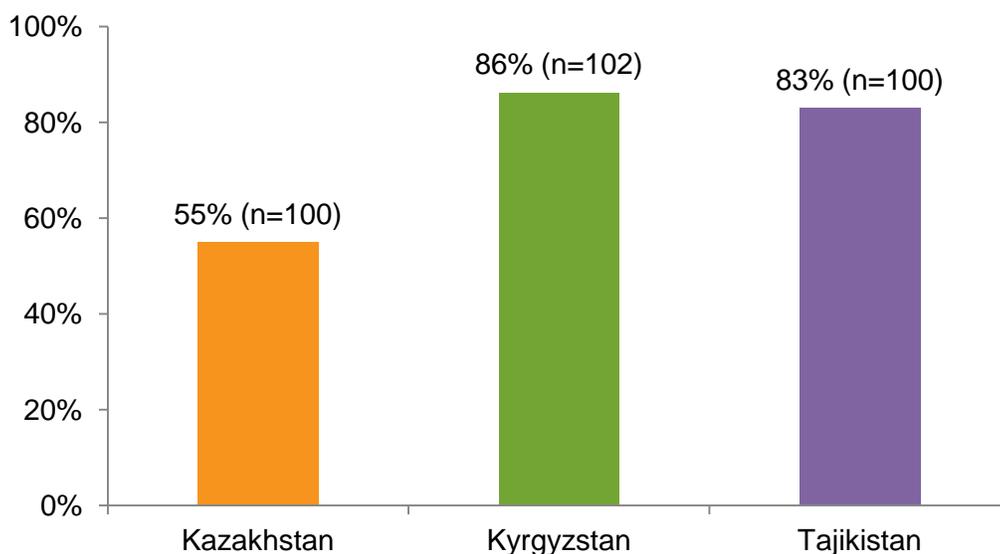
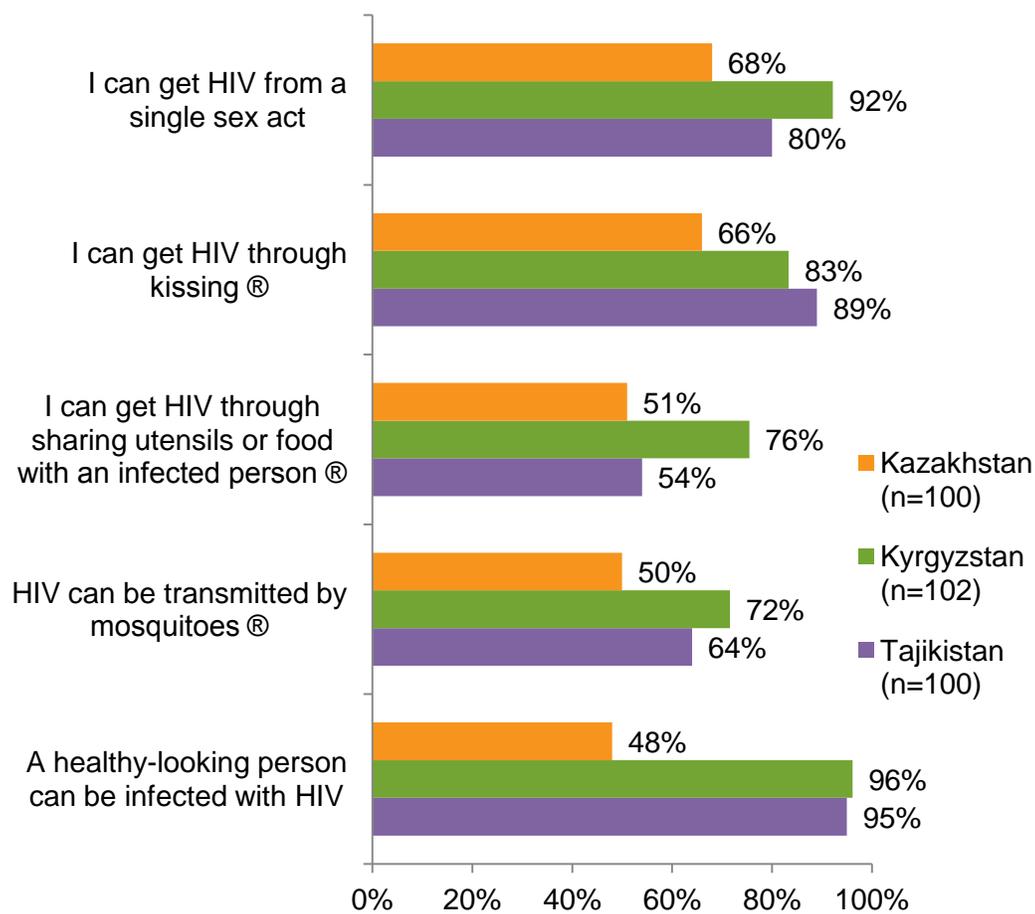


Figure 10a: SWs’ HIV-related knowledge



CONCLUSION AND PROGRAM RECOMMENDATIONS

This report aims to provide useful data that can help inform program activities and strategies in order to meet the needs of SWs in Central Asia. With input from external stakeholders, the research and program staff have reviewed the survey findings and have developed the following programmatic recommendations:

:: Tailor programs to SWs with particular characteristics.

1. According to the present study, most SWs have a primary or secondary education (**Table 3**), so it is important to conduct educational seminars and prepare informational materials suitable for their level of understanding. At the same time, SWs who have received little to no education should not be overlooked. Programs should continue to present information clearly and concisely, while taking into account language barriers and the need for multi-lingual texts and awareness material.
2. Many SWs report having children and are also unmarried or divorced (**Table 3**). Program messages and informational sessions should consider women with children, and programs should also focus on continuing to understand the challenges these women experience in regards to being able to access health-related services.

:: Focus on promoting more condom use with regular and casual partners.

1. *Vaginal and/or anal sex.* While condom use with commercial partners is relatively high in all countries, condom use with regular and casual partners is consistently lower with other partner types (**Figures 3a-c**). By focusing on changing attitudes towards condom use, programs can help SWs understand that condoms are not only necessary with clients. Such an approach should involve conducting activities to spread the following messages: That any partner – no matter how trustworthy – could have HIV; that you can protect yourself and your partner by using condoms; and that you are personally at risk for being infected with HIV if you have had sex even once without a condom.
2. *Oral sex.* Similar to condom use for vaginal and/or anal sex, fewer SWs report using condoms for oral sex, although fewer report engaging in oral sex in the first place (**Figures 3a-c**). The percentage of SWs who report using condoms during oral sex is particularly low in Tajikistan, even with commercial partners (**Figure 3c**). Programs should focus on emphasizing the risks associated with oral sex.

∴ **Continue to promote condom access while working to expand channels of condom distribution.**

1. *Pharmacies.* The results indicate that most SWs, in all countries, purchase their condoms at pharmacies (**Figures 5a-c**). It is important to understand why SWs purchase condoms at pharmacies and how pharmacies could be used to distribute informational brochures and printed materials on HIV prevention and safe sexual behavior. Information about the Project, as well as the contact information of outreach workers, could also potentially be shared at these pharmacies.
2. *Working within the available systems of condom distribution.* In Kazakhstan and Kyrgyzstan, SWs indicated that they purchase condoms from their administrators or female pimps (*mamochkas*) (**Figures 5a-c**). Thus, in some circumstances it may not be possible to distribute condoms or other materials directly to SWs, but rather program workers may have to go through administrators, pimps, or hotel managers. Programs should continue to understand and respect these systems in order to promote access of SWs to condoms. Hotels and *mamochkas* may be good targets for distributing informational materials as well.

∴ **Continue to work on promoting VCT utilization.**

1. *Testing services.* Most respondents had undergone HIV testing and received their results in the last 12 months, but there are still some SWs who have not utilized such services (**Figure 6**). Possible program action could involve working to increase the presence of mobile laboratories (by Republican AIDS centers) in all countries. Yet, mobile laboratories often process many clients and have little time to refer SWs onto other medical services. To counteract this, programs should provide mobile laboratories with printed materials about other services (e.g. STI diagnostic services and reproductive health services). Extending the operating hours of mobile laboratories to times that are most convenient for SWs would also help and allow more time to be spent on each client. In general, it is important to continue working to understand the HIV testing experiences of SWs, while continuing to encourage these testing locations and services to provide thorough and quality care.
2. *Testing with sexual partners.* Many SWs reported that they intend to get tested, but not with their sexual partner(s) (**Figure 8**). Programs should emphasize the message that although SWs can be free of HIV, it's important that their partners be tested as well. To avoid subjecting SWs to uncomfortable situations (such as exposing an unknowing partner to the fact that she is a SW), programs should focus on promoting couples

testing—testing not because they are a SW, but because all couples should test and know their results.

:: Knowledge

Programs should continue to focus on promoting knowledge of HIV transmission (**Figure 10**). Special attention should be placed on misconceptions surrounding HIV transmission routes, such as the incorrect beliefs that kissing, sharing utensils or food, or mosquitoes can transmit HIV. A percentage of SWs believe that a healthy-looking person cannot be infected with HIV (**Figure 10a**). Programs should emphasize the fact that even healthy-looking individuals without any symptoms can be infected with HIV, necessitating safe sexual behaviors with both clients and other partners.

:: There is still a minority of SWs who do not disclose the results of their last HIV test (**Figure 7**). When they do share results, SWs are selective as to whom they tell (**Figure 7b**).

1. *Disclosing results to a friend or acquaintance.* A large percentage of SWs choose to report the results of their last HIV test to a friend or acquaintance, particularly in Kazakhstan (**Figure 7b**). It is important for programs to understand why SWs choose to disclose their results to these individuals, and whether these SWs are able to receive substantial support afterwards (i.e., counseling, treatment, emotional support). By knowing who these friends/acquaintances are, programs can focus on incorporating these individuals into activities, thereby assuring that these individuals can provide the right support after SWs share the results of their last HIV test with them.
2. *Disclosing results to health specialists/doctors.* With the exception of Tajikistan, only a small percentage of SWs report their test results to a doctor/nurse (**Figure 7b**). This is an important finding given that the results of the present study also indicate that many SWs report having a positive attitude towards disclosing the results of their HIV test to a health specialist or doctor (**Figure 7a**). It is important to understand this disconnect between SWs' positive attitudes for reporting test results and the actual reporting of test results to health specialists or doctors. It is possible that these SWs feel that it isn't necessary to report their status to a health specialist (i.e., they may feel that it is only necessary to report it when they test positive). SWs should be taught the importance of sharing not just positive test results with their doctor, but negative ones as well. Programs should work with SWs to foster trust between the medical community and SWs so that SWs feel more comfortable with sharing their test results. Programs should also emphasize that SWs should share their test results (either negative or positive) with a health official. Furthermore, SWs need to understand

that AIDS is treatable, and that their status as a SW is not a barrier for getting treatment.

3. *Disclosing results to family members or relatives.* Most SWs did not share the results of their last HIV test with a family member or relative (**Figure 7b**). Attitudes, with the exception of Kazakhstan, are generally negative when it comes to sharing their test results with their family (**Figure 7a**). This hesitancy of SWs may stem from a fear of stigmatization by family members. Programs should provide counseling for SWs on how to cope with these fears as well as provide support for them throughout this process by offering support groups aimed at discussing family issues. In order to encourage support from family members and relatives, understanding family members should also be incorporated into informational sessions. At these sessions they can learn the importance of providing support, as well as learn how to provide it (i.e., encouraging HIV testing, being open to discussing one's HIV status).
4. *Sexual partners.* A small percentage of SWs choose to share the results of their last HIV test with their regular sexual partners, and some share the results of their last HIV test even to their casual and commercial partners (**Figure 7b**). Programs need to focus on supporting the message that it is important for SWs to disclose their status to their sexual partners (positive or negative), especially to their regular partners. However, it is also important for programs to thoroughly understand the relationship of SWs to their partners, such as histories of violent behavior or abuse, before discussing disclosure. Programs should focus informational and counseling sessions on teaching and supporting SWs throughout the process of revealing their HIV status to their sexual partners.

:: Diversify places where SWs can seek diagnosis and/or treatment of STIs.

A relatively significant amount of SWs report the presence of STI symptoms, the highest amount being in Tajikistan (**Figure 9**). Some SWs also report having sought treatment for these symptoms, the highest percentage from Kyrgyzstan (**Figure 9**). In Kazakhstan, most SWs seek treatment at a governmental hospital/clinic or a private clinic (**Figure 9a**). In Kyrgyzstan, most SWs seek treatment at a governmental hospital clinic, private clinic, and family medicine center (**Figure 9b**). In Tajikistan there is more diversity in the places that SWs go to seek treatment, but most SWs go to a reproductive health center and family medicine center (**Figure 9c**). Continuing to focus on expanding the number of places available for the treatment of STIs is crucial. It is also beneficial to continue working with these service-providers to ensure they provide quality services (i.e., establishing partnership agreements, conducting trainings on how to work with SWs). It is important to note that a

small percentage of SWs in Tajikistan self-treated their STI symptoms or sought advice from a friend for treatment. Programs should continue to inform and teach SWs about the symptoms of STIs, as well as when and where it is necessary to seek proper treatment of STIs.

:: Continue to work to build trust between programs and clients.

While most SWs report consistent condom use with commercial partners (**Figure 3a-c**), it is also important to keep in mind that social desirability bias may affect SWs' responses, especially since the interviews were conducted by outreach workers. For example, while it is generally true that SWs consistently use condoms with commercial partners, SWs may be less likely to use condoms if their commercial partner offers more money in exchange for sex without a condom. Therefore, it is important to continue working to build trust between programs and sex workers, so they feel comfortable with offering honest and reliable information about their personal practices (i.e., they understand the importance of providing accurate information to outreach workers).

Challenges to implementing these program recommendations include the stigma against SWs and HIV-infected SWs, the quality of health services received by SWs, and the difficulty in accessing SW populations. Another challenge is convincing SWs to communicate with their sexual partners on the importance of these partners protecting their own sexual health as well (i.e., having these partners test for HIV, having these partners use condoms). For these reasons, it is important that future programming should focus on effective, inter-disciplinary communication. Researchers, programmers, local NGOs, and governmental agencies should collaborate in order to establish accurate data on the HIV & AIDS epidemic among SWs in Central Asia and continue to work to discover creative solutions and methods to empower this risk group.

ANNEXES:

ANNEX A: MONITORING TABLES

MONITORING TABLE 1

Drug Use and Sharing of Injecting Equipment among Female Sex Workers (SW),
Central Asia, 2012

Risk Group: Female Sex Workers (SW) in Central Asia (Kazakhstan, Kyrgyzstan
and Tajikistan)

Behavior: Drug Use and Sharing Injecting Equipment

INDICATORS	Kazakhstan 2012 N=100	Kyrgyzstan 2012 N=102	Tajikistan 2012 N=100	Total 2012 N=302
BEHAVIOR/USE				
DRUG USE BEHAVIOR	% or Mean	% or Mean	% or Mean	% or Mean
Ever tried alcohol	92.0%	100.0%	75.8%	85.6%
Ever had sex after drinking alcohol	75.0%	87.3%	56.3%	68.0%
Ever tried drugs	21.0%	17.6%	17.0%	18.7%
Ever had sex after using drugs	17.0%	13.7%	16.0%	16.1%
Ever injected drugs	1.0%	2.9%	0.0%	0.8%
Substances used in the last month (Alcohol)	89.8% (85)	91.0%	84.8% (88)	87.6%
Substances used in the last month (Non-injecting drugs)	10.2% (85)	7.8%	15.2% (88)	12.2%
Substances used in the last month (Injecting drugs)	0.0% (85)	1.1%	0.0% (88)	0.2%
INJECTING BEHAVIORS	%	%	%	%
Gave used needle/syringe to another person during the last injection	0% (1)	50.0% (2)	0% (0)	13.1%
Used a needle and/or syringe used by another person during the last injection ☹	0% (1)	0.0% (2)	0% (0)	0.0%
Gave used injecting equipment (for example, spoon, cotton, cup, rinse water, etc.) to another person during the last injection ☹	0% (1)	33.3% (3)	0% (0)	8.8%
Used injecting equipment (for example, spoon, cotton, cup, rinse water, etc.) used by another person during the last injection	0% (1)	66.7% (3)	0% (0)	17.5%
INJECTING RELATED RISK BEHAVIOR	%	%	%	%
Received help when injecting drugs for the first time	0% (1)	66.7% (3)	0% (0)	17.5%

Was helped by friend at first injection	0% (1)	100.0% (2)	0% (0)	100.0%
Ever helped someone injecting drugs for the first time	0% (1)	0% (3)	0% (0)	0%
Provided sex in exchange for drugs (among those who used drugs)	0% (1)	5.6% (18)	31.3% (16)	15.3%
UTILIZATION OF MEDICAL SERVICES (Of those who have ever injected drugs)	%	%	%	%
Has ever been treated at a rehabilitation treatment service	0.0% (20)	5.6% (18)	0.0% (15)	0.8%

Note:

1. All proportions or means are adjusted for population characteristics.
2. ✪ - Logframe indicator

MONITORING TABLE 2

Consistent Condom Use and Risky Sexual Behaviors among Female Sex Workers, Central Asia, 2012

Risk Group: Female Sex workers in Central Asia (Kazakhstan, Kyrgyzstan and Tajikistan)

Behavior: Consistent Condom Use, Utilization of STI Services

INDICATORS	Kazakhstan 2012 N=100	Kyrgyzstan 2012 N=102	Tajikistan 2012 N=100	Total 2012 N=302
BEHAVIOR/USE				
SEXUAL BEHAVIOR / CONDOM USE	% or Mean	% or Mean	% or Mean	% or Mean
Mean age at first sexual intercourse	17.65	17.42	16.83	17.24
Mean age at the first sex for money	21.14	20.80	23.37	22.13
Ever bought a condom	73.0%	95.1%	88.0%	83.1%
Ever used a condom	100.0%	100.0%	98.0%	99.1%
Used a condom at the last sex with a client ✪	96.0%	94.1%	91.0%	93.4%
Used a condom from the beginning of intercourse until the end during the last sex with a client	92.9%	91.2%	83.3%	88.2%
Ever used a female condom	4.0%	11.8%	13.0%	9.3%
Where do you most often buy condoms?				
Bar/club	1.4%(73)	4.1%(97)	2.3%(88)	2.2%
Shop/kiosk	16.4%(73)	29.9%(97)	2.3%(88)	11.8%
Pharmacy	79.5%(73)	75.3%(97)	98.9%(88)	87.9%
Hotel/Sauna/Apartment	52.1%(73)	22.7%(97)	28.4%(88)	36.9%
Adminstrator/female pimp (<i>mamochka</i>)	17.8%(73)	26.8%(97)	1.1%(88)	11.3%
Bazaar	0.0%(73)	18.6%(97)	0.0%(88)	2.6%

INDICATORS	Kazakhstan 2012 N=100	Kyrgyzstan 2012 N=102	Tajikistan 2012 N=100	Total 2012 N=302
	% or Mean	% or Mean	% or Mean	% or Mean
Ever received free condoms	86.7%	83.3%	100.0%	92.4%
Regular Partner				
Had sex with regular partners in the past 12 months	73.0%	49.0%	90.9%	77.9%
Number of regular partners in the past 12 months (among those had)	1.00(73)	1.00(50)	2.00(90)	2.00
Had vaginal and/or anal sex with regular partner(s) in the last month	56.0%	41.2%	85.9%	67.8%
Number of times had vaginal and/or anal sex with regular partner(s) in the last month (among those had)	8.00(53)	6.00(40)	18.00(82)	15.00
Always used condoms when had vaginal and/or anal sex with regular partner(s) in the last month	32.1%(56)	55.8%(43)	51.8%(85)	44.6%
Always used condom from the beginning of intercourse until the end each time having sex (vaginal and/or anal sex) with regular partner(s) in the last month (among those who used condom)	84.8%(33)	93.3%(30)	77.2%(79)	82.5%
Had oral sex with regular partner(s) in the last month	7.0%	17.6%	36.7%	22.3%
Number of times had oral sex with regular partner(s) in the last month (among those had)	6.83(7)	3.93(17)	17.20(27)	12.00
Always used condoms when had oral sex with regular partner(s) in the last month	57.1%(7)	55.6%(18)	5.9%(34)	33.1%
Always used condoms from the beginning of intercourse until the end each time having oral sex with regular partner(s) in the last month (among those who used condom)	100.0%(4)	92.9%(14)	33.3%(15)	68.0%
Casual Partner				
Had sex with casual partners in the past 6 months	22.7%	28.0%	62.2%	41.8%
Number of casual partners in the past 6 months (among those had)	1.00(22)	2.00(28)	6.00(61)	5.00
Had vaginal and/or anal sex with casual partner(s) in the last month	13.3%	21.0%	57.1%	34.7%
Number of times had vaginal and/or anal sex with casual	1.44(13)	2.00(21)	10.00(54)	8.00

partner(s) in the last month (among those had)				
INDICATORS	Kazakhstan 2012 N=100	Kyrgyzstan 2012 N=102	Tajikistan 2012 N=100	Total 2012 N=302
	% or Mean	% or Mean	% or Mean	% or Mean
Always used condoms when had vaginal and/or anal sex with casual partner(s) in the last month	50.0%(14)	90.5%(21)	58.9%(56)	59.8%
Always used condoms from the beginning of intercourse until the end each time having sex (vaginal and/or anal) with casual partner(s) in the last month (among those who used condom)	100.0%(9)	95.2%(21)	91.8%(49)	95.5%
Had oral sex with casual partner(s) in the last month	2.0%	10.0%	11.5%	7.5%
Number of times had oral sex with casual partner(s) in the last month (among those had) (Mean number)	2.00(2)	5.86(8)	10.22(8)	6.36
Always used condoms when had oral sex with casual partner(s) in the last month	50.0%(2)	88.9%(9)	9.1%(11)	36.5%
Always used condoms from the beginning of intercourse until the end each time having oral sex with casual partner(s) in the last month (among those who used condom)	100.0%(2)	77.8%(9)	42.9%(7)	70.3%
Commercial Partner				
Had sex with commercial partners in the past 6 months	100.0%	100.0%	100.0%	100.0%
Number of commercial partners per week in the past 12 months (among those had)	28.00	20.00	14.00	19.00
Had vaginal and/or anal sex with commercial partner(s) in the last week	94.0%	100.0%	98.0%	96.7%
Number of times had vaginal and/or anal sex with commercial partner(s) in the last week (among those had)	29.79(93)	15.00(102)	18.10(92)	21.22
Always used condoms when had vaginal and/or anal sex with commercial partner(s) in the last month	95.7%(94)	99.0%(102)	81.3%(96)	89.5%
Always used condom from the beginning of intercourse until the end each time having sex (vaginal and/or anal) with	97.9%(94)	99.0%(102)	93.3%(89)	95.9%

INDICATORS	Kazakhstan 2012 N=100	Kyrgyzstan 2012 N=102	Tajikistan 2012 N=100	Total 2012 N=302
	% or Mean	% or Mean	% or Mean	% or Mean
commercial partner(s) in the last month (among those who used condom)				
Had oral sex with commercial partner(s) in the last week	38.0%	52.0%	31.9%	37.1%
Number of times had oral sex with commercial partner(s) in the last week (among those had)	16.19(38)	10.00(52)	13.57(22)	15.00
Always used condoms when had oral sex with commercial partner(s) in the last week	89.5%(38)	98.1%(53)	17.2%(29)	57.1%
Always used condoms from the beginning of intercourse until the end each time had oral sex with commercial partner(s) in the last week (among those who used condom)	91.9%(37)	98.1%(53)	65.2%(29)	80.4%
UTILIZATION OF MEDICAL SERVICES FOR STIs	% or Mean	% or Mean	% or Mean	% or Mean
Know where to seek medical help for STIs	96.0%	90.2%	97.0%	95.6%
Had abnormal genital discharge (strange color, smell, etc.) in the past 12 months	22.0%	30.4%	34.0%	28.8%
Number of times noticed this kind of discharge in the past 12 months (among those had)	3.22(20)	2.25(31)	2.27(34)	2.64
Had a genital sore or ulcer in the past 12 months	11.0%	2.9%	16.0%	12.2%
Number of times noticed this kind of sore or ulcer in the genital area in the past 12 months	2.28(11)	1.00 (3)	1.70 (16)	1.83
Had or suspected having STIs in the past 12 months	11.0%	10.8%	29.9%	19.7%
Number of episodes of STIs in the past 12 months (among those had)	5.03(10)	1.74(11)	1.56(25)	2.96
Sought medical services for diagnosis and/or treatment of STI symptoms in the past 12 months (among all)	45.0%	73.5%	39.4%	46.4%
Number of times sought medical services for diagnosis and/or treatment of STI symptoms in the past 12 months (among those sought)	5.88(44)	3.28(75)	2.69(39)	4.03

INDICATORS	Kazakhstan 2012 N=100	Kyrgyzstan 2012 N=102	Tajikistan 2012 N=100	Total 2012 N=302
	% or Mean	% or Mean	% or Mean	% or Mean
The place went for diagnosis and/or treatment of STI symptoms in the past 12 months	(47)	(77)	(52)	
Government hospital/clinic	63.9%	21.5%	7.8%	31.9%
Pharmacy	0.0%	0.0%	0.0%	0.0%
Polyclinic	7.9%	11.9%	13.8%	11.2%
Family medicine center	0.0%	32.8%	23.6%	15.6%
Private clinic	28.2%	33.9%	6.3%	18.8%
Self-treatment	0.0%	0.0%	2.3%	1.0%
Traditional healer	0.0%	0.0%	0.0%	0.0%
Friend/acquaintance	0.0%	0.0%	4.5%	2.1%
Friendly cabinet	0.0%	0.0%	17.1%	7.9%
Reproductive health center	0.0%	0.0%	24.6%	11.4%
Satisfaction at the last time using services for diagnosis or treatment of STIs	(46)	(75)	(39)	
Very satisfied	63.0%	24.0%	59.0%	55.7%
Somewhat satisfied	23.9%	53.3%	25.6%	28.9%
Neutral	8.7%	16.0%	7.7%	9.3%
Somewhat unsatisfied	2.2%	1.3%	7.7%	4.6%
Very unsatisfied	2.2%	5.3%	0.0%	1.6%
OPPORTUNITY	Mean	Mean	Mean	Mean
Availability				
It is difficult to always find a condom when I need one. ®	3.16	3.39	2.33	2.81
Condoms are easily available any time of the day.	3.55	3.69	3.35	3.48
Condoms are difficult to get at night. ®	3.11	3.07	2.56	2.85
I always have a condom with me.	3.05	3.53	3.44	3.29
I can get free condoms without a problem when I need them.	3.11	2.97	3.35	3.20
ABILITY	% or Mean	% or Mean	% or Mean	% or Mean
I find it difficult to use a condom all the time. ®	3.58	3.54	2.81	3.22
Knowledge				
HIV transmission routes knowledge (8 or better=high) ☆	55.0%	86.3%	83.0%	72.4%
I can get HIV from a single sex act.	68.0%	92.2%	80.0%	77.0%
I can get HIV through kissing. ®	66.0%	83.3%	89.0%	79.1%
I can get HIV through hugging. ®	82.0%	91.2%	84.0%	84.2%
I can get HIV through sharing utensils or food with an infected person. ®	51.0%	75.5%	54.0%	55.8%
HIV can be transmitted through	91.0%	100.0%	96.0%	94.6%

INDICATORS	Kazakhstan 2012 N=100	Kyrgyzstan 2012 N=102	Tajikistan 2012 N=100	Total 2012 N=302
	% or Mean	% or Mean	% or Mean	% or Mean
vaginal fluid.				
HIV can be transmitted through semen.	97.0%	99.0%	100.0%	98.7%
HIV can be transmitted through blood.	97.0%	99.0%	100.0%	98.7%
HIV can be transmitted through breast milk.	84.0%	94.1%	94.0%	90.1%
HIV can be transmitted by mosquitoes. ®	50.0%	71.6%	64.0%	59.5%
HIV can be transmitted by used injection needles.	98.0%	99.0%	88.0%	93.5%
Having a sexually transmitted infection (STI) (e.g. gonorrhea, syphilis, etc.) can increase the likelihood of contracting HIV.	94.0%	93.1%	89.0%	91.6%
An HIV test is the only way to tell if one has HIV.	85.0%	88.2%	94.0%	89.6%
The risk of catching HIV can be reduced by regularly using condoms.	91.0%	93.1%	94.0%	92.7%
The risk of contracting HIV can be reduced by always using clean/sterile needles.	91.0%	94.1%	89.0%	90.5%
Unprotected sex (without a condom) can increase the risk of contracting HIV and STIs.	99.0%	100.0%	95.0%	97.3%
A healthy-looking person can be infected with HIV.	95.0%	96.1%	48.0%	73.3%
HIV transmission from mother to child can be prevented.	85.0%	88.2%	78.0%	82.2%
Self-efficacy				
<i>Self-efficacy: condom use competency(Scaled construct)</i>	3.60	3.67	2.95	3.31
I can use a condom properly such that it does not break.				
I can use condoms without feeling embarrassed.				
I can use a condom even if I have drunk alcohol.				
<i>Self-efficacy: condom use negotiation(Scaled construct)</i>	3.63	3.78	3.12	3.41
I can convince a sexual partner that we use condoms.				
I can convince my sexual partner that using a condom is an indication of how I care about his health.				
I am able to deny sex with a sexual partner who refuses to use a condom.				

INDICATORS	Kazakhstan 2012 N=100	Kyrgyzstan 2012 N=102	Tajikistan 2012 N=100	Total 2012 N=302
	Mean	Mean	Mean	Mean
Social support				
My friends support my use of condoms.	3.59	3.85	3.08	3.39
My sexual partners support my use condoms.	3.56	3.45	2.92	3.25
MOTIVATION				
Attitude				
<i>General attitudes towards condom use (Scaled construct)</i>	3.01	3.13	3.03	3.03
Using a condom reduces sexual pleasure. ®				
Condoms are messy. ®				
Using a condom ruins the mood during sex. ®				
Attitudes about condom use with partners				
Condoms are only necessary with clients. ®	2.06	2.49	2.14	2.16
Condoms are not necessary when I trust my sexual partner. ®	2.55	2.86	2.66	2.65
I don't like using condoms with my regular sexual partners. ®	2.45	2.94	2.69	2.63
Beliefs				
Condoms are effective in preventing sexually transmitted infections (STIs)	3.60	3.96	3.58	3.64
Using a condom is reliable for protection against HIV.	3.63	3.89	3.52	3.62
Intentions to use condoms				
I plan to use condoms consistently with my regular sexual partners.	2.73	3.20	3.12	2.98
<i>Intentions: Future condom use (Scaled construct)</i>	3.64	3.93	3.22	3.49
I plan to use condoms consistently with my casual sexual partners.				
I plan to use condoms consistently with people I have sex with in exchange for money				
I plan to refuse to have sex with someone who will not use a condom.				
Internal locus of control				
I decide whether or not a condom is used with commercial sexual partners.	3.64	3.81	3.44	3.57
I decide whether or not a condom is used with a regular	3.36	3.58	3.15	3.29

INDICATORS	Kazakhstan 2012 N=100 Mean	Kyrgyzstan 2012 N=102 Mean	Tajikistan 2012 N=100 Mean	Total 2012 N=302 Mean
sexual partner(s).				
I decide whether or not a condom is used with a casual sexual partner(s).	3.51	3.85	3.11	3.37
External locus of control				
Alcohol is to blame if I do not use a condom with a sexual partner. ®	3.20	3.27	2.93	3.08
It is my client who decides if we use a condom or not. ®	3.27	3.64	3.18	3.28
I have no power to decide whether or not to use a condom with a client. ®	3.37	3.68	3.24	3.35

Note:

- All proportions or means are adjusted for population characteristics.
- For the majority of OAM (Opportunity, Ability and Motivation) factors the scale of 1 through 4 is used, unless otherwise noted. In this scale: 1 is completely disagree, 2 – disagree, 3 – agree, and 4 – completely agree. Mean scores are presented. A mean score of below 2.5 indicates that the majority disagrees with the statement and a mean score of higher than 2.5 indicates that the majority agrees. A mean score of 2.5 indicates that overall respondents neither agree nor disagree with the statement.
- ® - Reverse-coded items. Scores for these items have been reversed so that a high score = positive/desired response. Wording of these items has not been reversed and they read as they were presented to the respondents. For knowledge-based items, the scores for items have been reversed where the item is factually incorrect so the % presented is those who knew the correct answer.
- ⊗ - Logframe indicator

MONITORING TABLE 3

VCT Utilization among Female Sex Workers, Central Asia, 2012

Risk Group: Female Sex workers in Central Asia (Kazakhstan, Kyrgyzstan and Tajikistan)

Behavior: VCT Utilization

INDICATORS	Kazakhstan 2012 N=100	Kyrgyzstan 2012 N=102	Tajikistan 2012 N=100	Total 2012 N=302
BEHAVIOR/USE				
UTILIZATION OF VCT SERVICES	% or Mean	% or Mean	% or Mean	% or Mean
Ever been tested for HIV	96.0%	90.2%	97.0%	95.6%
Number of times tested for HIV (among those tested) (Median)	6.80 (93)	4.00 (91)	3.00 (97)	4.00
Got tested for HIV in the past 12 months	93.0%	80.4%	95.0%	92.2%
Number of times get tested for HIV in the past 12 months (among those tested in the last	3.00 (93)	2.00 (82)	2.00 (95)	2.00

12 months) (Median)				
INDICATORS	Kazakhstan 2012 N=100	Kyrgyzstan 2012 N=102	Tajikistan 2012 N=100	Total 2012 N=302
	%	%	%	%
Received the results of the last test (among those tested in the last 12 months)				
Yes – the same day	18.3% (93)	14.6% (82)	90.5% (95)	51.3%
Yes – later	76.3% (93)	85.4% (82)	9.5% (95)	46.6%
Tested for HIV and received results in the last 12 months ☼	88.0% (93)	80.4% (82)	95.0%(95)	90.2%
Reasons for not receiving the results of the test	(5)			
Too long to wait	20.0% (5)			
Too far to travel to return to pick-up	20.0% (5)			
I was not present at the moment when it was delivered	20.0% (5)			
Moved to another place	20.0% (5)			
No time	20.0% (5)			
Disclosed the result of the last HIV test (among those received the result)	68.2%(88)	64.6%(82)	88.4%(95)	77.1%
To whom did you disclose the results of your last test?	(60)	(84)	(54)	
Family member/relative	10.0%	31.5%	8.3%	12.2%
Husband/regular sexual partner	13.3%	7.5%	45.9%	27.6%
Friend/acquaintance	78.3%	54.7%	41.7%	58.0%
Casual sexual partner	0.0%	5.6%	11.9%	6.3%
Commercial sexual partner/client	3.3%	0.0%	29.8%	15.1%
Doctor/nurse	3.3%	9.4%	36.5%	19.6%
Social worker	0.0%	0.0%	31.0%	14.4%
Others	6.7%	0.0%	2.4%	3.7%
Received pre- and/or post-test counseling at the place where you were last tested (among those tested)	81.5%(92)	89.0%(82)	98.9%(95)	90.7%
Was the counseling done alone or as a couple?				
Alone	94.7% (75)	97.2% (72)	78.7% (94)	87.6%
As a couple	5.3% (75)	2.8% (72)	21.3% (94)	12.4%
Were referred to other services after the last time receiving voluntary counseling and testing (among those receiving VCT)	34.2%(76)	82.2%(73)	80.9%(89)	62.6%
Satisfaction with the voluntary counseling and testing services				
Very satisfied	49.3% (75)	47.2% (72)	66.7% (93)	57.1%

Somewhat satisfied	36.0% (75)	45.8% (72)	26.9% (93)	33.1%
Neutral	14.7% (75)	6.9% (72)	6.5% (93)	9.8%
Somewhat unsatisfied	0.0% (75)	0.0% (72)	0.0% (93)	0.0%
Very unsatisfied	0.0% (75)	0.0% (72)	0.0% (93)	0.0%
INDICATORS	Kazakhstan 2012 N=100	Kyrgyzstan 2012 N=102	Tajikistan 2012 N=100	Total 2012 N=302
	%	%	%	%
Reasons for not satisfied with the voluntary counseling and testing services				
Doctor's attitude	50.0% (8)	0.0% (3)	0.0% (6)	19.7%
Attitude of facility staff	14.3% (8)	33.3% (3)	0.0% (6)	10.3%
Waiting time	37.5% (8)	33.3% (3)	100.0% (6)	65.9%
Facility conditions	0.0% (8)	33.3% (3)	0.0% (6)	4.7%
Others	0.0% (8)	0.0% (3)	0.0% (6)	0.0%
Will go back to this facility (site) if need services (counseling, testing, and others) (among those got tested and received counseling in the last 12 months)	94.4%(71)	95.9%(73)	100.0%(89)	97.2%
Will recommend this voluntary counseling and testing service to friends (among those got tested and received counseling in the last 12 months) ☺	94.6%(74)	94.5%(73)	94.4%(89)	94.5%
Ever got tested for HIV with a sexual partner as a couple (among all)	23.0%	10.8%	28.6%	23.9%
Intend to get tested for HIV in the next 12 months (among all)	99.0%	80.2%	100.0%	96.8%
OPPORTUNITY	Mean	Mean	Mean	Mean
Availability				
Voluntary counseling and testing services for HIV are easily available.	3.47	3.88	3.59	3.58
Voluntary counseling and testing services for HIV are available any time of the day.	3.27	3.68	3.03	3.22
I know where I can go for voluntary counseling and testing services for HIV. ☺	3.52	3.84	3.45	3.53
Social Norms				
My friends believe that getting tested for HIV regularly is important.	3.54	3.78	3.26	3.44
ABILITY	Mean	Mean	Mean	Mean
Self-efficacy				
I am confident that I can reveal my HIV status (positive or negative) to my regular sexual partner(s).	3.23	2.37	3.02	3.01
I am confident that I can reveal my HIV status (positive or	2.80	2.40	1.94	2.34

negative) to my family/relatives.				
I am confident that I can reveal my HIV status (positive or negative) to a health specialist/doctor.	3.70	3.57	3.55	3.61
MOTIVATION	Mean	Mean	Mean	Mean
I plan to get tested for HIV within the next three months.	3.64	3.80	3.53	3.62
I plan to get tested for HIV with my sexual partner(s) in the next three months.	2.48	2.00	3.00	2.66
I plan to get tested for HIV regularly.	3.81	3.87	3.44	3.64

Note:

1. All proportions or means are adjusted for population characteristics.
2. For the majority of OAM (Opportunity, Ability and Motivation) factors the scale of 1 through 4 is used, unless otherwise noted. In this scale: 1 is completely disagree, 2 – disagree, 3 – agree, and 4 – completely agree. Mean scores are presented. A mean score of below 2.5 indicates that the majority disagrees with the statement and a mean score of higher than 2.5 indicates that the majority agrees. A mean score of 2.5 indicates that overall respondents neither agree nor disagree with the statement.
3. 🌐 - Logframe indicator

ANNEX B: RELIABILITY ANALYSIS

RELIABILITY ANALYSIS 1:

Consistent Condom Use and Risky Sexual Behaviors among Female Sex Workers, Central Asia, 2012

Risk Group: Female Sex workers in Central Asia (Kazakhstan, Kyrgyzstan and Tajikistan)

Behavior: Consistent Condom Use, Utilization of STI Services

Composite Variables	2012 (N=303)
	Cronbach's α
ABILITY	
Knowledge	
HIV transmission routes knowledge (8 or better=high) I can get HIV from a single sex act. I can get HIV through kissing. ® I can get HIV through hugging. ® I can get HIV through sharing utensils or food with an infected person. ® HIV can be transmitted through vaginal fluid. HIV can be transmitted through semen. HIV can be transmitted through blood. HIV can be transmitted through breast milk. HIV can be transmitted by mosquitoes. ® HIV can be transmitted by used injection needles	Index – no alpha required
Self-Efficacy	
<i>Self-efficacy: condom use competency</i> I can use a condom properly such that it does not break. I can use condoms without feeling embarrassed. I can use a condom even if I have drunk alcohol.	($\alpha = 0.750$)
<i>Self-efficacy: condom use negotiation</i> I can convince a sexual partner that we use condoms. I can convince my sexual partner that using a condom is an indication of how I care about his health. I am able to deny sex with a sexual partner who refuses to use a condom.	($\alpha = 0.776$)
MOTIVATION	
Attitude	
<i>General attitudes towards condom use</i> Using a condom reduces sexual pleasure. ® Condoms are messy. ® Using a condom ruins the mood during sex. ®	($\alpha = 0.712$)
Intention	
<i>Intentions: Future condom use</i> I plan to use condoms consistently with my casual sexual partners. I plan to use condoms consistently with people I have sex with in exchange for money I plan to refuse to have sex with someone who will not use a condom.	($\alpha = 0.823$)