CURATIO INTERNATIONAL FOUNDATION

HIV risk and prevention behavior among Men who have Sex with Men in Tbilisi and Batumi, Georgia

Bio-Behavioral Surveillance Survey in 2015

Study Report

Prepared by:

Curatio International Foundation

Center for Information and Counselling on Reproductive Health – Tanadgoma

The Global Fund To Fight AIDS, Tuberculosis and Malaria

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Acknowledgements

Curatio International Foundation (CIF) and the Association “Tanadgoma” would like to acknowledge the financial support provided by the GFATM under the project "Generating evidence base for risk behavior change and effectiveness of preventive interventions among high risk groups for HIV/AIDS”, which made this survey possible.

The report was prepared by Nino Tsereteli (Tanadgoma) and Dr. Ivdity Chikovani, Dr. Natia Shengelia, Lela Sulaberidze (CIF).

These surveys would not have been accomplished without collaboration with the Georgian AIDS and Clinical Immunology Research Center, whose professional staff carried out the laboratory testing.

The authors appreciate the highly professional work of the Tanadgoma staff – coordinator of the project, field supervisors, the interviewers and the social workers for their valuable input in recruitment and interviewing process.

The BSS team also wishes to thank all participants who agreed to dedicate their time and effort to the surveys.

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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
AI	Anal Intercourse
BSS	Behavioral Surveillance Survey
CIF	Curatio International Foundation
GFATM	The Global Fund to Fight AIDS, Tuberculosis and Malaria
GARPR	Global AIDS Response Progress Report
GEL	Georgian Lari
HIV	Human Immunodeficiency Virus
IDP	Internally Displaced Person
KP	Key Population
MSM	Men who have Sex with Men
MSMW	Men who have Sex with Men and Women
NGO	Non-Governmental Organization
OR	Odds Ratio
PWID	People Who Inject Drugs
RDS	Respondent Driven Sampling
RDSAT	Respondent Driven Sampling Analysis tool
SHIP	STI/HIV Prevention
SPSS	Statistical Package for the Social Sciences
STI	Sexually Transmitted Infection
TPHA	TreponemaPallidumHemagglutination Assay
USAID	United States Agency for International development
USD	United States Dollar
UNGASS	United Nations General Assembly Special Session

Definitions

High-risk behavior – Any behavior that puts an individual or individuals at increased risk of contracting STIs/HIV or transmitting STIs/HIV to another individual (e.g., having multiple sex partners without using condoms consistently; sharing used non-sterile needles, syringes or other devices used to prepare the drug among IDUs).

Anonymous-linked testing – testing, where no names are taken but results are linked to a number that only the participant knows.

Consistent condom use – use of condoms every time sexual relations occur, which includes vaginal, anal, or oral sex.

Man who has Sex with Man (MSM) - A man, who has had sexual contacts with other men, independently of his self-identification as gay.

Man who has Sex with Man (MSM) (for the survey purposes) - A man, who has had sexual contacts with other men during the last 12 months, independently of his self-identification as gay.

Regular sex partner for MSM – A sex partner, with whom sexual contacts and established without material remuneration and the relationship is stable.

Occasional (non-regular) sex partner for MSM – A sex partner, for a short period of time, who is not a regular partner and with whom sexual contact is established without materials remuneration.

Commercial sex partner for MSM – A sex partner with whom sexual contact is established in exchange for material remuneration, meaning that MSM paid money or gave some other material remuneration to the partner.

Client for MSM involved in commercial sex – A sex partner with whom sexual contact is established in exchange for material remuneration, meaning that MSM received money or some other material remuneration from the partner.

Executive summary

Introduction

Georgia is among the countries with low HIV/AIDS prevalence (0.3% (0.2-0.4%) among adult population) but with a high potential for the development of a widespread epidemic. From the early years of epidemic injecting drug use was the major route for HIV transmission, however for the last three years heterosexual transmission is prevailing. According to the national HIV surveillance system, infections acquired through homosexual contact contributed to 13% and 11% of all newly registered cases in 2013 and 2014, respectively.

The current study represents a next wave of BBS among MSM in Tbilisi and the first wave for Batumi city. In this wave, involving the second city into the study enlarged the study setting. The previous studies were carried out in 2007, 2010 and 2012. The objective of the 2015 BBS was to measure the prevalence of HIV, syphilis and hepatitis C among MSM, to provide measurements of key HIV risk behaviours and to generate evidence for program planning, advocacy and policy-making. The study was implemented within the GFATM-funded project "Generating evidence base for risk behavior change and effectiveness of preventive interventions among high risk groups for HIV/AIDS" by Curatio International Foundation (CIF), Center for Information and Counseling on Reproductive Health - Tanadgoma and the Infectious Diseases, AIDS and Clinical Immunology Research Center.

Methods

The study used a cross-sectional design and a respondent-driven sampling methodology (RDS). The inclusion criteria for participation in the study included the following: age 18 years or older; homosexual anal or oral contact during the previous 12 months; being a resident of Tbilisi or Batumi and ability to understand and communicate in Georgian.

The study protocol and questionnaires were approved by the National Ethical Committee of the HIV/AIDS Patients Support Foundation (certificate # 776/877 of 30.01.20125. Recruitment was accomplished by nine seeds in Tbilisi and 8 – in Batumi and a sample size of overall 300 respondents (Tbilisi) and 115 respondents (Batumi) was reached. Face-to-face individual interviews were conducted in Georgian by the trained interviewers using interviewer-administered electronic questionnaires. The biomarker component involved analyses of blood specimens for HIV, Syphilis and hepatitis C.

Data entry and analysis took place with the help of the SPSS software. Respondent Driven Sampling Analysis Tool version 7.1.4 (RDSAT, Cornell University, 2004) software was used for the analysis of waves and equilibrium. The sample reached the equilibrium and desired sample size was obtained in Tbilisi,

while it failed to reach the equilibrium for the key variables in Batumi. Therefore it was decided not to produce the population estimates in RDSAT and analyse the data in the RDS-A / Gile's SS estimator (RDS Analyst software 3.1.1).

Results

Key findings from 2015 survey and comparisons with 2010 as well as 2012 survey data are given below.

Socio-demographic characteristics

- The median age was 28 years in Tbilisi ad 29 – in Batumi, majority had secondary level education, had never been married, big proportion of MSM had permanent work, and majority's monthly income was less than 500 GEL (230 USD[1]).
- The study did not reveal high proportion of heavy alcohol use or injecting drug use, indicating that there is no overlap with key populations such as MSM and PWID.

The socio-demographic structure of Tbilisi MSM population studied in 2015 (both in Tbilisi and in Batumi) is close to that studied in Tbilisi in 2010. However, in 2015 bigger proportion of Tbilisi MSM report having permanent job compared to 2010. The study findings are limited to MSM mainly from the lower socioeconomic layer.

As proved by last three surveys alcohol use, and especially drug use is not widespread among MSM. Having sexual contacts under alcohol is common, and condom use rates in these cases are quite low.

Sexual behaviour

- MSM had different types of both male and female sex partners (regular, occasional and commercial). The median number of male partners (anal/oral partners) in the last 12 months 6 in Tbilisi and 5 – in Batumi. Tbilisi number is higher than that of 2010.
- Out of MSM that reported anal partner during the last year 63.2% in Tbilisi and 78.8% - in Batumi used a condom during their last sexual contact. Condom use at last AI reported in 2015 is 63.2% in Tbilisi - slightly higher compared to 2010. There is reduction of condom used with all types of partners during last intercourse however the change is statistically non-significant. Consistent condom use with all types of sexual partners was higher in Batumi compared to Tbilisi. Besides, consistent condom use with regular partners was less prevalent compared to occasional and paid partners. Also, consistent condom use with regular and occasional partners was less prevalent compared to last anal sex with the same type of partner. Condom use practices have not changed during the last 5 years. Overall, condom use with various types of

[1]According to the average exchange rate of the National Bank of Georgia for the fieldwork period in 2015.

partners is not very low, but still is not at satisfactory level.

- Consistent condom use with all types of male partners is less prevalent than last AI condom use.
- At both survey sites overall more than 70% of MSM reported having ever a female sex partner (regular, occasional or paid) and more than half at both survey sites had a female partner during the last 12 months, with a median number of three partners. Since 2010 there is increase in condom use at last sex with female partners in Tbilisi. As for Batumi, this rate is also high.
- Slightly more than one third of MSM in both cities were ever involved in group sex and out of that majority reported participation in the group sex during last year. Lower proportion of MSM reported being involved in commercial sex (not more than 10% at both survey sites) than in 2012, which could be explained by migration of MSM for sex work abroad.

The study showed high sexual activity among MSM. Risky sexual practices are quite widespread: The MSM reported a large number of different types of partners, both male and female, insufficient and in some cases decreased use of condoms, especially their consistent use with any type of male and female partners and involvement in group sexual practices often without condoms. High risk practices have not changed and in some cases have worsened over the last five years. These tendencies are reflected in the HIV prevalence increase and, besides, raise concerns about the potential bridging role of MSM in HIV transmission to general population.

Condoms and lubricants

- There was a slight increase in the proportion of MSM who reported receipt of condoms from preventive programs during the last 12 months in Tbilisi from 40.3% in 2010 to 43.5% in 2015.
- Awareness about condoms stays high. Awareness about the lubricants as well as their reported use during the last AI has improved vastly in Tbilisi and is also high in Batumi. These are higher indicators compared to the previous surveys, which can be explained by provision of free lubricants by preventive programs, started since 2014.

Much more MSM are aware about lubricants and mention places where to obtain them, lubricant use has also increased, due to improved access. Awareness on places of condom supply is high among MSM, and proportion of MSM received condoms from preventive programs has slightly increased since 2010.

Knowledge and testing on HIV

- Knowledge and testing on HIV showed significant improvement in Tbilisi since 2010 - from 19.9% in 2010 to 30.4% in 2015 (p (2-tailed), 0.001). In Batumi this indicator was measured the first time and reached 35.2%.
- During the recent five years there is statistically significant improvement in MSM awareness where to get HIV test in case of necessity ($p < 0.001$), as well as in the proportion of MSM who

were tested during the last 12 months and received results (p< 0.001). This can be explained by sustainable use of HIV rapid (finger prick) testing in the outreach under preventive programs, which makes HIV testing easily accessible to the target group.

- Researchers also measured increase in testing uptake from 2012 to 2015, and it was also statistically significant (p (2tailed) – 0.07).

Knowledge about HIV infection is high and has improved over the last years, but this does not improve personal risk perception among MSM. HIV testing uptake is improving gradually, however this does not lead to safer sexual behaviour.

Violence

In Tbilisi violence rate because of sexual orientation or homosexual behaviour in the last 12 months has increased significantly compared to 2012 (comparison of SPSS calculated data, (p – 0.00). Massive attacks on LGBT activists and their supporters in May 2013 contributed to increase in negative attitudes as well as aggressive actions towards persons with homosexual orientation and/or behaviour.

Violence because of sexual orientation exists and increases.

Program coverage / media

- Coverage by preventive intervention measured by awareness of where to get a HIV test and receipt of a condom during the last 12 months increased from 20.9% in 2010 to 43.5% in 2015 in Tbilisi. This increase was statistically significant (p (2tailed) < 0.001). In Batumi coverage is already quite high – about 40%.
- NGOs, internet and friends seem to be the major and best way for conveying messages to MSM.

Coverage by preventive programs has been gradually increasing during the last 5 years. New HIV prevention interventions introduced since 2010 and especially since 2014, as well as strengthened LGBT community organizations should have played a positive role in coverage increase.

Biomarker

- The most alarming finding of this study is increase in HIV prevalence from 6.4% in 2010 to 25.1% in 2015. Batumi HIV prevalence is also very high – 22.3% .
- As for syphilis, its prevalence is quite high but does not show difference compared to 2010 results.
- Hepatitis C prevalence has not been measured since 2010, when it was up to 17% in Tbilisi. This time it was found as low as 7% in Tbilisi but much higher in Batumi - 18.9%

HIV prevalence increase has shown steady and alarming trend among MSM in Tbilisi, similarly high prevalence is found in Batumi. Number of HIV infected MSM is increasing, hence, there is necessity to implement prevention strategies that are evidence based and are informed by realities of HIV transmission risks for MSM.

Recommendations

Based on the findings of this study the recommendations focus on: 1) Increasing the coverage of MSM by preventive interventions aimed at risk reduction through implementing various approaches covering all segments of MSM population and specifically targeting young MSM and positive prevention strategies among HIV positive MSM; 2) Focusing on reducing HIV-associated, as well as homosexuality-associated stigma and discrimination; 3) Conducting systematic surveillance of both behavioral and selected biological markers among MSM also in other locations, in order to monitor the prevalence dynamics of HIV infection and other STIs; 4) Ensure active recruitment in the following rounds of the survey through introducing more attractive incentive system and adding testing for various STIs in the biomarker component. 5. Conduct size estimation studies with improved innovative approaches to reach other hidden, stigmatised, or otherwise hard-to-reach population.

Table 1: Summary of Core Indicators

	Tbilisi		Batumi	
Key indicators	**RDS population estimates, % (95% CI)**	**n/N**	**RDS-A population estimates, % (95% CI)**	**n/N**
Socio-demographic characteristics				
Median age (years)	28.0*	300	29.0*	115
Education (No education/Elementary /Secondary)	53.2(44.5-61.9)	162/300	58(43.4-72.6)	67/115
Education (Higher / incomplete higher)	46.8(38.1-55.6)	138/300	42(27.3-56.6)	48/115
Georgian nationality	99.5(98.9-100)	297/300	99.2(98.3-100)	113/115
Marital status				
Married	7.7(3.7-11.7)	31/300	21.1(10-32.1)	22/115
Divorced/Separated	14.5(8.6-21.8)	49/300	13.9(5.1-22.6)	18/115
Widower	1.7(0-4.7)	2/300	2(-1-5)	2/115
Never been married	76.2(67.9-84)	218/300	63.1(49.7-76.4)	73/115
Alcohol and drug use				
Alcohol use last month				
I did not drink	19.1(12.3-27.7)	62/300	39.5(25.2-53.8)	32/115
Every day	8.2(3.5-13.7)	25/300	0.2(-0.1-0.5)	1/115
At least once in a week	40.9(30.6-49.9)	114/300	35.1(22.8-47.4)	46/115
At least once in two weeks	14.2(9-21)	44/300	17(8-26.1)	22/115
Once in a month	17.1(10.4-24.5)	53/300	8.2(1.3-15.1)	14/115
Had sex under the alcohol influence during last 12 month	65.4(55.8-74)	195/300	48.2(34.5-61.7)	62/115
Consistent condom use under the alcohol influence	49.7(35.2-60.6)	67/195	43.5(27.3-59.7)	28/62

	Tbilisi		Batumi	
Key indicators	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
Drug used during the last 12 months	22.9(15.7-30.6)	59/300	35(20.8-49.3)	46/115
Drug injected during the last 12 months	0.6 (0.2-1.3)	7/300	4.9(-1.4-11.3)	3/115
Sexual behavior				
Median anal/oral partners in the last 12 months	6.0 *	300	5.0 *	115
≤ 24	5.0*	111	5.0*	35
≥ 25	6.0 *	189	5.0*	80
Used condom at last anal intercourse (AI)	63.2 (53.5-72.6)	177/276	78.8(64.1-93.4)	95/115
≤ 24	62.5 (49.1-75.8)	62/101	87	31/35
≥ 25	65.5(48-73.6)	115/175	75.3	64/80
Used condom at last oral intercourse	32.2(20.4-44.1)	92/239	66.7(50.5-83)	54/84
Consistent condom use during AI in the last 12 months (GARPR indicator)	31.9(23.3-41.8)	78/276	47(32.9-61)	52/115
≤ 24	24.1(13.8-37.2)	25/101	57.1	18/35
≥ 25	36.9(24.7-50.6)	53/175	42.7	34/80
Had regular anal/oral male partner in the last 12 months	75.2 (66.1-83.6)	234/300	92(83.4-100)	106/115
Used condom at last AI with regular partner	58.6(43.7-67.4)	127/220	67.9(55.8-80.1)	71/106
≤ 24	54.2(34.9-68.2)	46/85	89	24/31
≥ 25	60.8(32.8-64.2)	81/135	59.6	47/75
Consistent condom use during AI in the last 12 months with regular partners	33.2(22.2-43.1)	62/220	46.7(31.9-61.6)	47/106
≤ 24	34.5(18.6-45.8)	23/85	63.5	16/31
≥ 25	34.8(18.7-46.8)	39/135	40.2	31/75
Had occasional anal/oral male partner in the last 12 months	75.5(67.6-83)	237/300	76.7(64.7-88.8)	87/115
Used condom at last AI with occasional partner	55.5(42.1-70.3)	143/228	83.6(68.5-98.7)	72/86
≤ 24	55.4(35.3-76.6)	49/85	95.9	22/26
≥ 25	60 (42.8-76.4)	94/143	78.9	50/60
Consistent condom use during AI in the last 12 months with occasional partners	41.7(27.6-54.6)	91/228	58.5(42-75)	50/86
≤ 24	36.7(19.3-58.2)	34/85	56.2	15/26
≥ 25	49.3(32.9-66)	57/143	59.3	35/60
Had anal/oral paid male partner in the last 12 months	9 (4.3-14.5)	28/300	2.3(0.1-4.4)	5/115
Used condom at last AI with paid partner	43.5(0-100)	17/23	71.8(34.1-109)	4/5
≤ 24	50.2(0-100)	5/5	100	2/2
≥ 25	17.3(0-100)	12/18	57.9	2/3
Consistent condom use during AI with paid partner in the last 12 months	41.2(0-100)	11/23	71.8(35.4-108)	4/5
≤ 24	56(0-100)	3/5	100	2/2

	Tbilisi		Batumi	
Key indicators	**RDS population estimates, % (95% CI)**	**n/N**	**RDS-A population estimates, % (95% CI)**	**n/N**
≥ 25	24(0-67.6)	8/18	57.9	2/3
Had male client (received material reward for sex) in last 12 months	8.3(4.2-12.9)	54/300	10.2(3.3-17.2)	17/115
Used condom at last intercourse with male client	68.9(12.6-91.5)	39/54	92.5(70.8-114)	14/17
Had female partner in the last 12 months	55.4(45.3-65.2)	168/300	53(36.9-69)	60/115
Used condom at last intercourse with female partner	71.2(65.6-87.6)	112/168	66(48-83.8)	42/60
≤ 24	76.7(78.2-96.1)	38/49	93.2	18/20
≥ 25	71.6(64.8-89.9)	74/119	53.5	24/40
Used condoms at last group sex	37.3(7-75.6)	47/84	86.1(63.8-109)	23/31
Consistent lubricant use during AI in the last 12 months	26.2(16.1-38)	68/201	28.3(13.4-43.2)	19/74
STIs				
Test for any STI in the last 12 months	55.8(30.3-61.6)	127/199	60.2(45.9-74.5)	49/75
Never tested for any STI	39.4(30.6-49.2)	101/300	37.6(24.4-50.8)	75/115
Knowledge, opinions and attitudes towards HIV/AIDS				
Have heard about the HIV/AIDS	88.9(80.9-94.4)	268/300	86.8(77-96.6)	110/115
≤ 24	87.1(72.4-96)	100/111	89.7	34/35
≥ 25	93(85.8-97.9)	168/189	85.6	76/80
Correctly answer 5 questions (GARPR indicator)	30.4(22.4-38.6)	96/300	35.2(23.6-46.9)	55/115
≤ 24	27.8(17.2-39)	32/111	48.1	17/35
≥ 25	33.6(21.9-43.6)	64/189	29.9	38/80
Know where to get HIV test	79.6(70.2-87.3)	228/268	82.8(71.2-94.4)	97/110
Tested for HIV In the last year	67.9(53.8-86)	125/180	80.6(69.3-91.8)	59/74
Never tested on HIV	30.3(22.4-41.1)	87/268	38.4(26.9-500)	36/110
Received HIV test last year and know their results (GARPR indicator)	38.4(28.5-47.4)	125/300	43(29.7-56.5)	59/115
≤ 24	43.2(31.4-57.6)	48/111	59.5	19/35
≥ 25	36.8(22.8-47.8)	112/189	36.2	40/80
Experience of violence				
Experienced violence in last 12 months	32(23.2-41.7)	93/300	4.7(-1.5-10.9)	7/115
Preventive program coverage				
Know where to get HIV test and received condoms from preventive programs in the last 12 months (GARPR indicator)	43.5(33.2-53.9)	154/300	41.9(29.6-54)	62/115
≤ 24	42(29.1-56.5)	59/111	37.5	18/35
≥ 25	39.8(23.4-50.8)	95/189	43.6	44/80
Biomarker				
Positive for HIV(GARPR indicator)	25.1(15.7-34.1)	65/300	22.3(10.4-34.2)	21/115

	Tbilisi		Batumi	
Key indicators	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
≤ 24	16.6(5-27.3)	20/111	15.5	6/35
≥ 25	30.8(20.3-46.5)	45/189	25.2	15/80
Positive for Syphilis	35(25 -44)	110/300	24.6(11.7-37.5)	28/115
≤ 24	16.4(7.1-26.7)	24/111	6.7	5/35
≥ 25	48.6(35.9-61.4)	86/189	32.1	23.80
Hep C	7.1(2.7-13)	32/300	18.9(7.9-30)	14/115
≤ 24	0.7(0-1.9)	4/111	1.2	2/35
≥ 25	10.8(3.2-18.3)	28/289	26.3	12/80

** Calculated in SPSS*

Introduction

The overall prevalence of HIV infection in Georgia is 0.3% (0.2-0.4%) among adult population (15-49 years of age). As of October 7, 2015 a total of 5,257 HIV cases have been registered by the national HIV surveillance system. Increasing number of HIV infections are diagnosed annually. The National Center for Disease Control and Public Health (NCDCPH) reported 564 new cases of HIV in 2014 (15.1 new cases per 100,000 population), while in early 2000 this number did not exceed to 100.[1] Since the first reports of HIV in the late 1980s in Georgia, injecting drug use was the major route of transmission. However, for the last three years heterosexual contacts became a dominant route of HIV spread. According to the national HIV surveillance system, HIV infections acquired through homosexual contact account to a small proportion of all HIV cases. The homosexual route of transmission contributed to 13% and 11% of all newly registered cases in 2013 and 2014, respectively.[2]

HIV surveillance in Georgia has primarily focused on Key Populations (KP) surveillance using Biomarker-Behavior Surveillance (BBS) among these groups. BBS among KPs has been introduced since 2002 in Georgia, in order to make its contribution to informing the national response to HIV. Save the Children Georgia Country Office conducted the first BBS among MSM in Tbilisi under the USAID-funded STI/HIV Prevention (SHIP) project in 2007.

The second and third waves of BBS among MSM were conducted in Tbilisi in 2010 and 2012under the GFATM funded HIV/AIDS surveillance system strengthening project. Study used respondent-driven sampling methodology to recruit study participants in study setting. The studies were implemented by Curatio International Foundation (CIF) in partnership with Center for Information and Counseling on Reproductive Health – Tanadgoma and the Infectious Disease, AIDS and Clinical Immunology Research Center (in 2010) and NCDCPH (in 2012).

The current study represents a next wave of BBS among MSM in Tbilisi and the first wave for Batumi city. In this wave, involving the second city into the study enlarged the study setting.

The objectives of the study are to:

- Measure the prevalence of HIV, Syphilis and Hepatitis C among the key population;
- Provide measurements of key HIV risk behaviours;
- Generate evidence for advocacy and policy-making.

The study was implemented within the GFATM-funded project “Generating evidence base for risk behavior change and effectiveness of preventive interventions among high risk groups for HIV/AIDS” by Curatio International Foundation (CIF), Center for Information and Counseling on Reproductive Health - Tanadgoma and the Infectious Diseases, AIDS and Clinical Immunology Research Center.

Methods

Study design

The study used a cross-sectional study design. Study participants (415 respondents in total) were recruited using respondent-driven sampling (RDS) in two cities of Georgia: Tbilisi and Batumi. Condom use at last anal intercourse was used as a key indicator for sample size calculation. On the basis of the earlier survey (2012 BSS, Tbilisi) a baseline value of the indicator was 73.2%. The current survey aimed to detect a 15% (2-sided) change of the proportion at a 95% significance level and the power of 84%. Design effect was estimated to be 2.5 based on the RDS design. The desired sample size was 300 MSM in Tbilisi, and 250 MSM in Batumi.

Sampling procedure

Appropriate sampling is crucial to ensuring that BBS generates reliable picture of trends assessed by this study. Variety of sampling approaches is proposed for recruitment of MSM and other KPs to collect the risk behavior data. Time location sampling (TLS),[3,4] chain referral sampling,[5,6] targeted sampling[7] and community based methods, such as RDS,[8,9,10,11]are well suited for investigating KPs. But the latter has been considered to be more robust methodologically, unlike snowball sampling, RDS uses a mathematical model for weighting the data collected in order to get a representative sample.[12] RDS has been used widely all over the world; specifically it was employed in over 460 studies from 69 countries.[13]

RDS is based on the premise that peers are better able, than outreach workers and researchers, to locate and recruit other members of a hidden population. It differs from traditional snowball sampling in three respects: RDS involves a dual incentive system – a reward for being interviewed and a reward for recruiting others into the study; subjects are asked to recruit their peers into the study and recruitment quotas are introduced.[14]The BBS among MSM in Tbilisi in 2012 was carried out by using RDS method.

For the current survey the MSM were recruited through RDS in both study settings – Tbilisi and Batumi. Inclusion criteria for participation in the study included the following: 1) age 18 years or older, 2) homosexual anal or oral contact during the last 12 months, 3) being a resident of study areas - Tbilisi and Batumi and 4) ability to understand and communicate in Georgian.

Association “Tanadgoma” which is a trusted and well-respected organization with extensive experience of working with the target population conducted fieldwork. The first step was to recruit initial respondents, so-called “seed” participants. The seeds were carefully selected to represent the demographic profile and socially diverse MSM network in Tbilisi and Batumi (age, income, occupation, education). In total 9 seeds were involved in the study in Tbilisi and 8 seeds – in Batumi.

Following an eligibility assessment and provision of informed consent the seeds underwent the behavioral and biological components of the study. After completion, they were given three uniquely coded non-replicable coupons to recruit three additional peers to participate in the study. The seeds were instructed on how to refer other eligible MSM. Each coupon was printed with a serial number, study location (map) and information about the monetary incentive. Those who came to the study site with a recruitment coupon and met the inclusion criteria were interviewed. These participants in turn received three coupons to recruit their peers in the study. Each participant was offered a financial incentive of 25 Gel (11 USD)[2] and an additional incentive of 5 Gel (2.25 USD) for each eligible person they recruited.

The MS Excel based software specifically developed for the coupon tracking[3] was used to manage the data on the coupons given to participants.

To ensure that participants met the eligibility criteria, a verification procedure was followed at the study site. The verification procedure, conducted by an experienced social worker, included a preliminary informal discussion. The participants were asked different questions face to face in a private setting, so that it was possible to detect whether they belonged to the target group. The basic questions asked were related to knowledge and experience of the participants about places and means for MSM to find partners, sexual practices they use with their partners, frequency of partner change, health problems related to homosexual relations they have experienced etc.

The eligible respondents were assigned unique identification number. Also, in order to overcome subject duplication, field coordinators and social workers paid special attention to physical characteristics of the participants such as height, weight, scars, tattoos and some biometric measures. Every shift of field workers included some person from the previous shifts, in order to make sure that the same person did not take part in the survey for a second time.

Recruitment results for MSM

The recruitment in Tbilisi started with 5 seeds. Additional 4 seeds were added later to ensure sufficient number of respondents. In total, 9 seeds were active in Tbilisi survey. As for Batumi, the recruitment started with 5 seeds, and additional 3 seeds were added quite soon during the recruitment. In total, 8 seeds were active in Batumi survey.

[2]According to the average exchange rate of the National Bank of Georgia for the fieldwork period in 2015.
[3]Author HrvojeFuchek, Iskorak, Zagreb, Croatia

The basic demographic characteristics of the seeds are presented in theTable 2 below:

Table 2: Basic characteristics of the seeds

Basic Demographic Characteristics of seeds	Tbilisi	Batumi
	n	n
Age groups		
<=24	2	2
25-34	3	3
>=35	4	3
Nationality		
Georgian	9	8
Level of education completed		
Secondary	6	3
Higher/incomplete higher	3	5
Marital status		
Never been married	8	4
Married	1	1
Divorced/Separated	0	3
Employment status		
Permanent job	5	7
Temporary job	1	
Unemployed	3	1
Monthly income		
<=100 GEL	3	1
101-300 GEL	1	0
301-500 GEL	2	1
501-700 GEL	2	1
701-1000 GEL	0	2
>=1001 GEL	1	3
Total	9	8

All eligible respondents were asked six questions about their network size, specifically: “How many MSM do you know in Tbilisi/Batumi?”, “Among those, how many do you know personally (you know them by name and they know yours)?”, “How many of those are above 18 years”?, “How many of those had homosexual contact during the last 12 months?”, “How many of those have you seen during the last 3 months?” and “How many of those (who are over 18 years of age, are MSM, had homosexual contact during the last 12 months) would you consider to recruit for the study?”.

Following the verification procedure in Tbilisi 21 and in Batumi - 6 potential participants were defined as non-eligible for the survey. Also, in Tbilisi two participants withdrew from the survey during the interview, most likely due to the fear of his status being disclosed.

Recruitment in Tbilisi reached the sample of 300 participants and was finalized after 9 weeks. In Batumi the fieldwork was stopped after 9 weeks due to time constraints related to the completion of the

project. After reaching agreement with the donor, the fieldwork was resumed again for 2 additional weeks, but brought almost no results. The desired sample size in Batumi (250 participants) was not accomplished and only 115 MSM (including seeds) were recruited.

Measurements

The survey instrument used in the study was a standardized behavior questionnaire for MSM which is a part of standardized BBS methodology developed in the country in 2010.4 The instrument is based on a questionnaire provided in the manual Behavior Surveillance Surveys: Guidelines for Repeated Behavior Surveys in Populations at Risk for HIV, published by Family Health International.5 The questionnaire with slight modifications was applied in the previous BBSs among MSM in 2007, 2010 and 2012. For the given BBS a few additional revisions were made to the questionnaire in order to make sure that all indicators of the National and Global AIDS Response Progress Reporting are captured. A Georgian version of the questionnaire was pre-tested.

"Tanadgoma" staff was selected as interviewers based on familiarity with the target population and previous experience in similar studies. Interviewers' training, which also included orientation on RDS procedures, was provided prior to the field implementation.

The biomarker component involved testing of blood specimens for HIV, Syphilis and hepatitis C. Sample analyses were done at the laboratory of the Infectious Diseases, AIDS and Clinical Immunology Research Center laboratory.

Table 3: Test systems used in biomarker component

Biomarker	Screening	Confirmation
HIV	HIV Ag/Ab ELISA	Western Blot HIV Blot 2.2, MP Biomedical
Syphilis	SYPH IgM ELISA test (Dia.Pro Diagnostic Bioprobes srl, Italy)	
Hepatitis C	Anti-HCV ELISA (Bio-Rad; Diapro, Italy)	

The study protocol and questionnaires were approved by the National Ethical Committee of the HIV/AIDS Patients Support Foundation (certificate # 776/877 of 30.01.20125. During the study design and field implementation the following ethical issues were taken into consideration:

- Participation in the surveys was strictly voluntary. Participants were free to withdraw at any time and were informed that refusal or withdrawal would not affect services they would

[4] http://www.curatiofoundation.org(Georgian version)
[5] http://gametlibrary.worldbank.org/pages/19_Surveys_surveillance_English.asp

normally receive.

- Complete anonymity was ensured. No names or personal identifiers were recorded; all documentation was labelled only by a study number.
- The staff engaged in the study, were trained in discussing sensitive issues and protecting participants' confidentiality and human rights.
- Individuals identified as positive for HIV, Syphilis or hepatitis C were offered counselling and referred to designated facilities for further testing and/or free treatment.

Data collection

The data collection period in Batumi was from February17, 2015 to April20, 2015, then the fieldwork resumed on May 22, 2015 and continued till May 31, 2015. Data collection took approximately 9 weeks. In Tbilisi data collection period was the same 9 weeks, starting from April 21, 2015 to June 12, 2015. Interviews were available from 11:00 pm to19:00 pm in Tbilisi and from 12:00 pm to 20:00 – in Batumi, Monday to Friday, at a fixed site – the Tanadgoma offices in Tbilisi and Batumi.

After registration, the participants were taken to interview rooms to maintain privacy. Face-to-face individual interviews were conducted in Georgian by the trained interviewers using interviewer-administered electronic questionnaires. A small number of hard copies of questionnaires were printed out in case of technological issues.RDS forms were paper-based and filled in manually by the interviewers. Each interview lasted on average 20 minutes. Following the completion of the behavioural component, participants were asked to voluntarily provide a blood sample for testing on infections (see above, section "Measurements"). If a participant agreed, pre-test counselling was provided and 5 ml of blood was collected on site by a trained nurse. The blood was centrifuged and samples were transported to the laboratory of Infectious Diseases, AIDS and Clinical Immunology Research Center. The transportation in Tbilisi was done within one week hours from sample collection, and from Batumi – once in two weeks. The blood tests were anonymous-linked. Each MSM that volunteered to provide a blood specimen was given an identification number, which was recorded on the blood tube and the questionnaire. In addition the participant was given a card with the identification number and with the organization's telephone number and address. The testing results were reported back to the study site within two weeks. The participants were asked to return, with their identification card, to receive their results. Post-test counselling was provided on site.

Internal quality control of the fieldwork was provided by the Tanadgoma staff and external control – by the CIF staff. The completed questionnaires were checked for consistency, and any problems identified were followed up with the interviewers.

Data processing and analysis

Data entry and analysis took place with the help of the SPSS software. Examining frequencies and cross-tabs and checking the logic of all variables in the datasets resolved any discrepancies. Hard and electronic copies of the completed questionnaires were kept at the CIF office.

Respondent Driven Sampling Analysis Tool version 7.1.4 (RDSAT, Cornell University, 2004) software was used for the analysis of waves and equilibrium. In order to ascertain wheather Tbilisi sample achieved equilibrium or not, we selected three main indicators-condom use, HIV testing and HIV prevalence[6] for further analysis. The sample reached the equilibrium for all three key indicators and desired sample size was obtained in Tbilisi, while it failed to reach the equilibrium for the key variables in Batumi, meaning that the sample composition changed for more than 2.5% up to the final wave. Therefore it was decided not to produce the population estimates in RDSAT and analyse the data in the RDS-A / Gile's SS estimator (RDS Analyst software 3.1.1). RDS-A is also provided for the analysis of RDS data and it allows for many types of analysis. Using Gile's SS (Sequential Sampler) is recommended when the sample is a significant fraction of the target population.[15] It is based on the inclusion probabilities of members of the sample, which are based on reported network sizes. An estimate of the population size is required to use this estimator. Bivariate analysis was performed to find out association between an exposure and outcome. Statistically significant associations (95% confidence intervals not crossing the value 1.00) were presented. Comparison of selected indicators was done using 2012 and 2015 datasets.

Description of the target group

There is certain hierarchy reflected in existence of different subgroups in the MSM population in Tbilisi. This has been proved also by outreach experience of Tanadgoma, which has more than thirteen years working experience with this population. Since then the internal structure of the MSM population has not changed and is valid for 2015. MSM population can be divided according to two parameters: **social**

[6] The indiactors selection for equilibrium analysis was based on GARPR indicator list.

status (“with money” and “without money”, using the language of MSM) and **involvement in commercial sex**.

1. Description of MSM according to the social status:

1.1. MSM with a lower socio-economic background

This group includes mainly: MSM who arrived in the capital from other cities/regions in search of employment or other material benefits; and MSM that live in the capital with low or no income and mostly unemployed.

1.2. MSM with a relatively higher socio-economic background

This group includes persons with a relatively higher income, who can afford to visit bars, clubs and other gathering places; and so called “elite” gays, which include persons in high positions, for example, representatives of show business, in general, public faces.

As a rule, representatives of these two – high and low – tiers do not meet each other in everyday life. However, there is some type of relationship between them: mainly, generally knowing each other or having sexual contacts with persons belonging to the other group. The higher the social level of the MSM, the less the probability that he is involved in commercial sex as well as a lower frequency of occasional sexual contacts. And vice versa, the lower the social level of MSM, the higher the number of sexual partners and the higher the number of cases of involvement in commercial sex.

2. Description of MSM according to involvement in commercial sex:

2.1 MSM involved in commercial sex

This group includes mainly MSM standing at the bottom of socio-economic ladder and in exchange for material remuneration offer sexual services to other men.

The main reasons for involvement in commercial sex are: money, the opportunity of frequent change of partners and the possibility of having a good time.

This category of MSM can be characterized as representatives of the lower social tier, who are in dire economic situation; are residents of the capital, or from a regional city/village living in the capital for some time; the majority have no other occupation or job (quite a lot out of them are students); they tend not to be married or are separated, they have occasional or permanent female partners. They can be accessed at: the open gathering places in the city (so-called MSM cruising areas); as well as some closed places - facilities (baths, saunas etc), which are known to be places where MSM can meet each other.

2.2 MSM not involved in commercial sex

This group includes mainly MSM that belong to middle and a relatively higher socio-economic background. These MSM mainly establish homosexual contacts with other men for the following reasons: pleasure - satisfying sexual needs, the opportunity of a frequent change of partners.

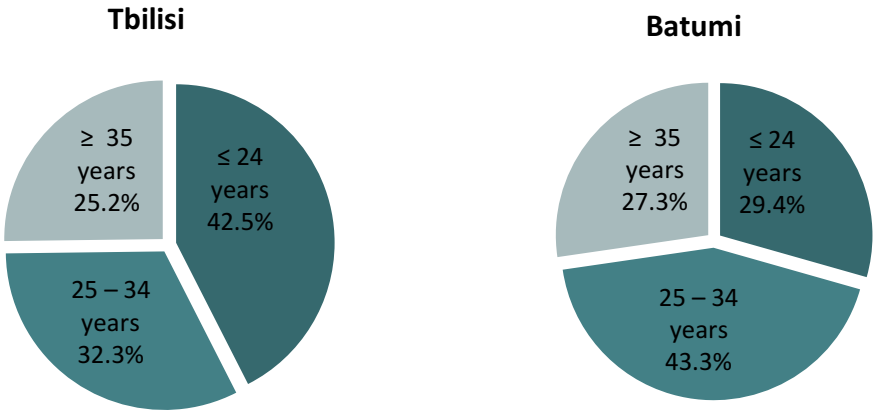
This category of MSM can be characterized as representatives of a higher social tier with a normal economic situation; they are residents of the capital, or from a regional city/village, that have been in the capital for some time; the majority have some other occupation or job; they tend to be married, with children, or have occasional or permanent female partners. They can be accessed at: the open gathering places in the city (known as places of gathering for MSM commercial sex workers), where they are looking for commercial or non-commercial sexual partners; the open gathering places in the city (known as places of gathering for MSM); closed entertainment places (cafes, bars, baths, movie theatres, etc), which are known to be places where MSM can meet each other.

Study Results

Socio-demographic characteristics

The median age of the recruited MSM was 28 years in Tbilisi and 29 years – in Batumi. More than 40% of the respondents in Tbilisi were young - were less than 25 years of age. In Batumi the younger age group made up to one third of the survey respondents, with the largest group (43.3%) being 25 – 34 years of age.

Figure 1: Age distribution



More than half of MSM in both cities received secondary education (51.6% in Tbilisi and 58.1% - in Batumi), and more than one third – higher education (35.6% in Tbilisi and 34.1% - in Batumi).

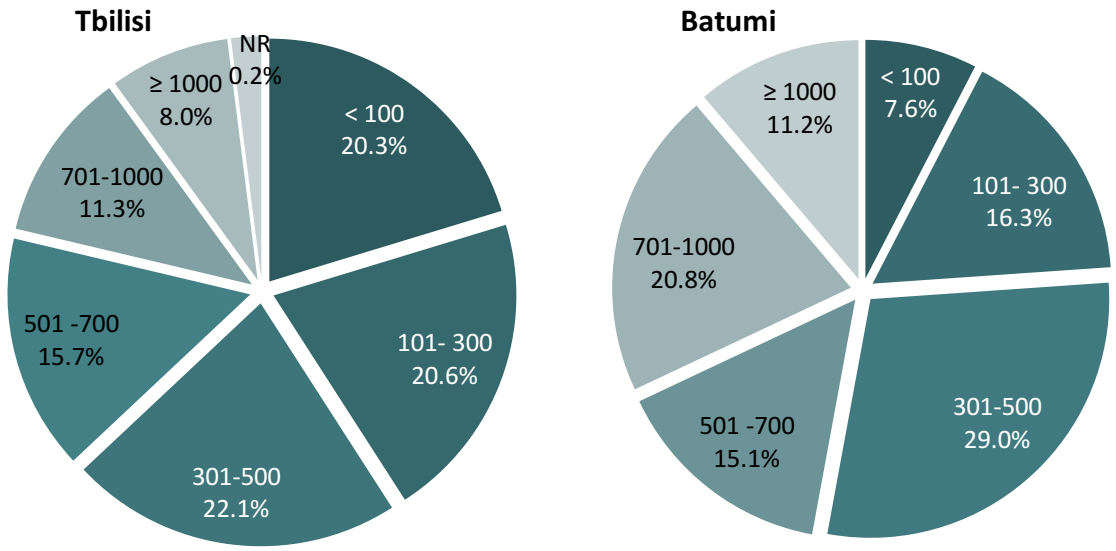
Large majority of the respondents were of Georgian nationality. Only 6.1% in Tbilisi and 2.8% - in Batumi were internally displaced persons. More than three fourths in Tbilisi and more than 60% - in Batumi were never married. Only 7.7% in Tbilisi and more than one fifth – in Batumi (21.1%) were currently married.

Big proportion of MSM had permanent work (43% in Tbilisi and 47% - in Batumi). More than one third of the respondents had no occupation (37.8% in Tbilisi and 38.1% - in Batumi), fewer had temporary work and less than 1% in both citieswere students.

Monthly income from 300 to 500 GEL (230 USD[7]) was reported by the largest proportion of the interviewed MSM in both cities (22.1% in Tbilisi and 29% - in Batumi).One fifth – in Tbilisi and 7.6% - in Batumi had monthly income less than 100 GEL (45 USD). Only 8% in Tbilisi and 11.2% - in Batumi reported having an income of more than 1000 GEL (450 USD) per month. To summarize, monthly income for the majority of MSM – 62% in Tbilisi and 52.9% - in Batumi – did not exceed 500 GEL.

[7]According to the average exchange rate of the National Bank of Georgia for the fieldwork period in 2015.

Figure 2: Monthly income in GEL



Alcohol and drug use

The study investigated alcohol and drug use for the 12 month period prior to survey, also questions were asked about sex under alcohol and sexual contacts with the injecting drug users.

Heavy alcohol consumption (every day) was mentioned by 19.1% of the respondents in Tbilisi and only by 0.2% - in Batumi.Drug use during the last 12 months was reported by 22.9% of MSM in Tbilisi and by 35.1% - in Batumi. Of them, marijuana was the most frequently cited non-injecting drug. Only 7 persons in Tbilisi (0.6%) and 3 persons – in Batumi (4.9%) had injected drugs during the last 12 months. Out of them, Subutex was the most frequently cited injecting drug; only one respondent in Tbilisi used shared needle/syringe at the last injection.

In Tbilisi 65.4% and in Batumi – 48.2% of respondents reported having had sex under the influence of alcohol during the last 12 months. As for consistent condom use under the influence of alcohol, this was reported by up to half of those MSM (49.7% in Tbilisi and 43.5% in Batumi) who responded positively to the question on having sex under alcohol.

Very small number of respondents (only 15 cases in Tbilisi and 1 case – in Batumi) had unsafe sex with injecting drug user during the last 12 months.

Sexual behavior

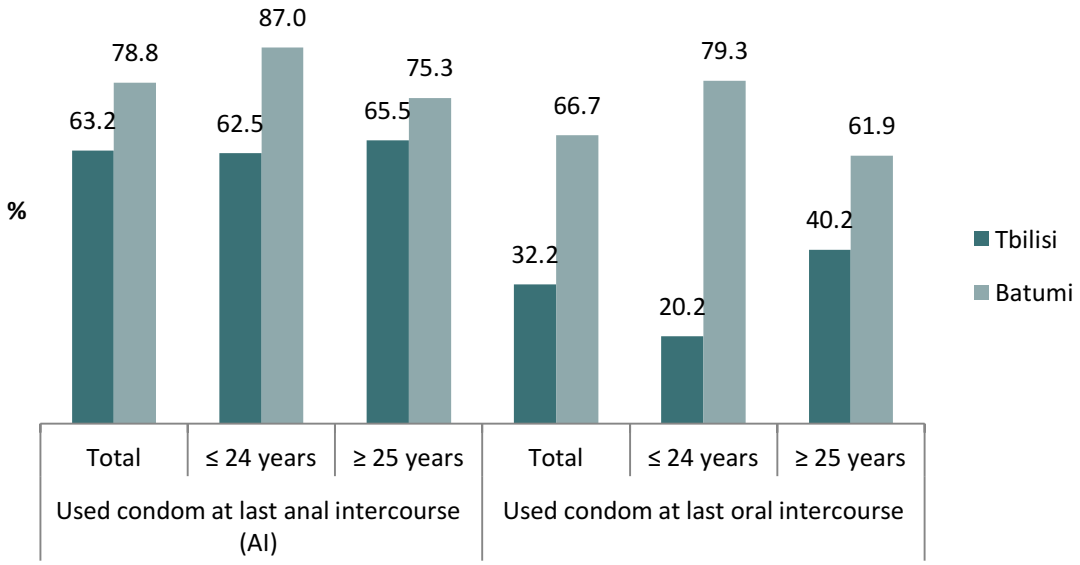
Male partners

The median number of male partners (anal/oral partners) in the last 12 months was 6 in Tbilisi and 5 – in Batumi. From 2 to 5 male partnerswere the most frequent response. Having one partner during the last year was mentioned by less than one fifth of respondents in both cities.

Large majority of interviewed MSM in Tbilisi (91.5%) and 100% - in Batumi had anal sexual intercourse during the last 12 months. Median number of anal partners is 5 at both survey sites and median number of sexual intercourses with anal partners is 6 per month in Tbilisi and 5 per month – in Batumi. Out of MSM that reported anal partner during the last year 63.2% in Tbilisi and 78.8% - in Batumi used a condom during their last sexual contact.

More than seventy percent of respondents (79.4% in Tbilisi and 74.3% - in Batumi) reported oral sexual intercourse during the last 12 months. It is noteworthy that in both cities a smaller proportion of MSM used condoms during their last oral intercourse compared with the anal sexual intercourse (32.2% in Tbilisi and66.7% in Batumi).

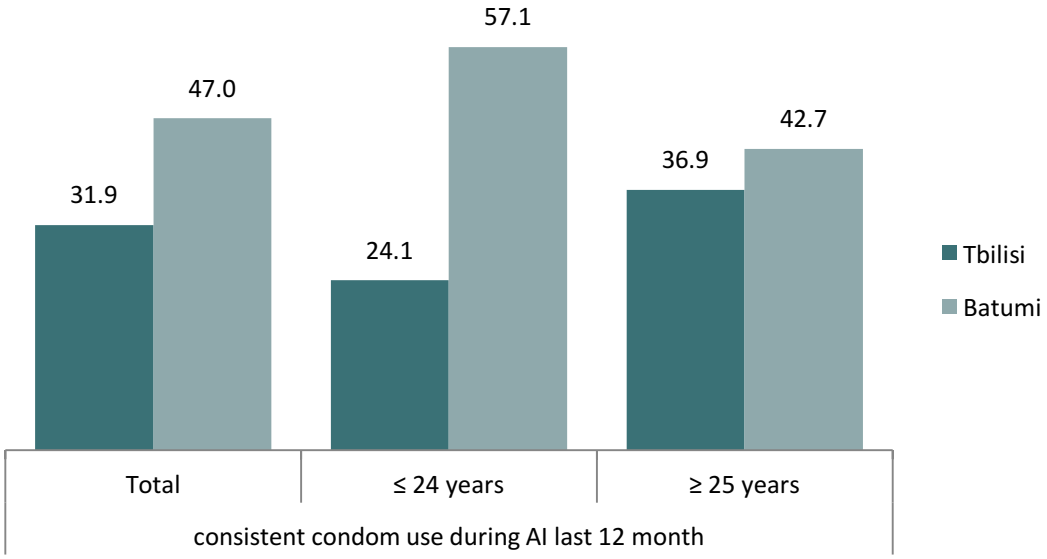
Figure 3: Used condom at last anal/oral intercourse



Participants were asked how frequently they used condom during anal intercourse (AI) with any type of partner during the last 12 months. Consistent condom use was defined as “always” use of condom in the last 12 months. About one third of MSM reported consistent condom use during anal sexual intercourse in Tbilisi (31.9%) and almost half – in Batumi (47%). It is likely that in Tbilisi older MSM used

condoms in a more consistent manner; however, in Batumi it is vice versa – younger group reported more consistent condom use.

Figure 4: Consistent condom use during AI in the last 12 months



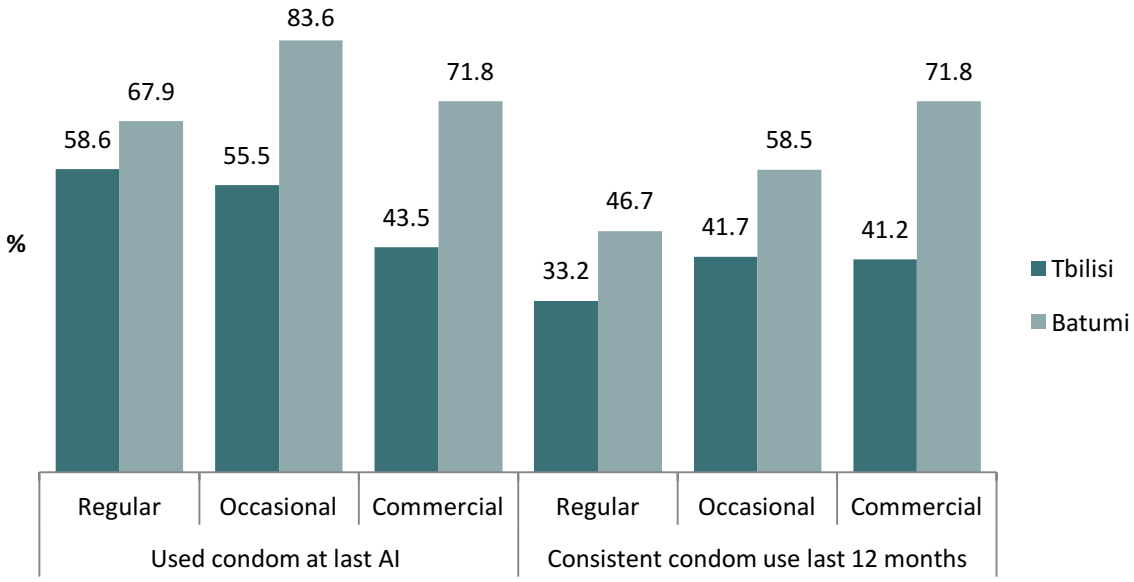
The study also looked at various sexual behaviour patterns with different types of male sexual partners (regular, occasional, and commercial).

Having regular anal/oral partners during the last 12 months wasreported by majority of MSM in both cities (75.2% in Tbilisi and 92% - in Batumi).The median number of this type of partners was one for Tbilisi and two – for Batumi. Three fourths of interviewed MSM in both cities (75.5% in Tbilisi and 76.7% in Batumi) had occasional anal/oral male sexual partners with five median partners. Only 9% of MSM in Tbilisi and 2.3% - in Batumi said that they paid for sex with a male partner for anal or oral sex during the last 12 months; median number of commercial partners was three in Tbilisi and four – in Batumi.

Proportion of MSM who reported condom use at their last AI with different types of partners varies from lowest 43.5% with paid (in Tbilisi) to highest 83.6% with occasional (in Batumi) partners. Given that the denominators for paid partners are very small these proportions should be interpreted with caution.

The respondents were asked to indicate frequency of protected sex with all types of partners in the last 12 months. Consistent condom use was defined as “always” use of condom during the last 12 months. It is noteworthy that consistent condom use with all types of sexual partners was higher in Batumi compared to Tbilisi. Besides, consistent condom use with regular partners was less prevalent compared to occasional and paid partners. Also, consistent condom use with regular and occasional partners was less prevalent compared to last anal sex with the same type of partner.

Figure 5: Using condoms during last AI and consistent condom use with regular, occasional and commercial partners



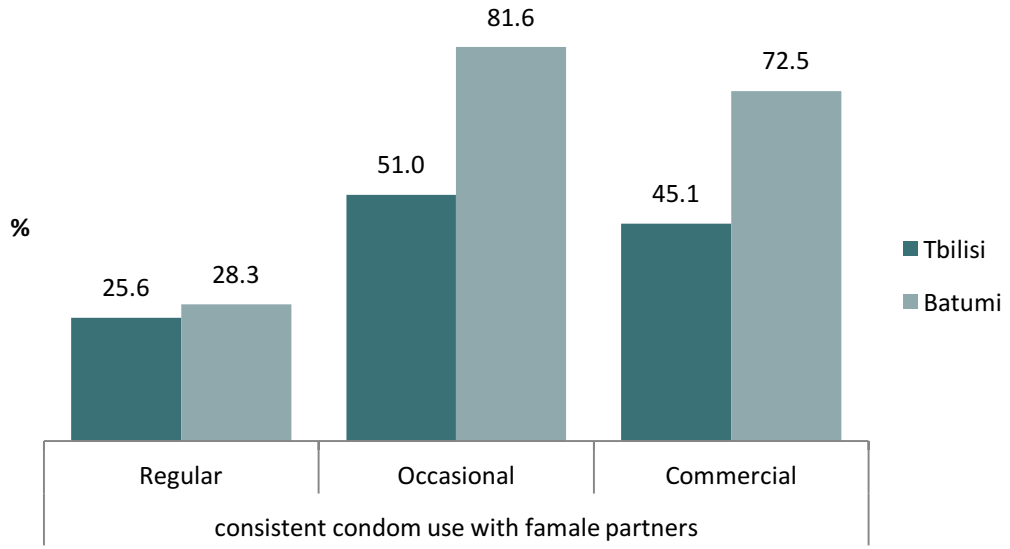
Majority of MSM, who did not use condom at last AI with regular partners, thought it was not necessary (37.1% in Tbilisi and 13.5% in Batumi); of those who did not use condom with occasional partners 14.5% in Tbilisi and 28.6% in Batumi did not have it.

Female partners

At both survey sites overall more than 70% of MSM reported having ever a female sex partner (regular, occasional or paid) and more than half at both survey sites had a female partner during the last 12 months (55.4% in Tbilisi and 53% in Batumi), with a median number of three partners. These MSM who had female partner in the last year reported median of 1 (Tbilisi) and 3 (Batumi) sexual contacts with females during the last month.

More than two thirds (71.2% in Tbilisi and 65.9% in Batumi) said they used a condom at last sexual intercourse with their female partner. Consistent condom use during the last 12 months with regular female partners was reported by about one fourthof MSM (25.6% in Tbilisi and 28.3% in Batumi) who had such partner. With occasional female partners reported consistent condom use was higher than with regular ones - 51% in Tbilisi and 81.6% in Batumi.

Figure 6: Consistent condom use with regular, occasional and commercial female partners



Engagement in commercial sex

The respondents were asked whether they have received any type of material remuneration for sex in the last 12 months. In Tbilisi 8.3% of MSM and in Batumi – 10.2% responded positively to this question, meaning that they were engaged in commercial sex, however, only 55.8% of them in Tbilisi and 37% - in Batumi identified themselves as sex workers. Median number of clients (anal/oral) is 2 in Tbilisi and 1 – in Batumi per working day.

The majority reported receiving money from their clients. The cost of services differed,but prevalent amounts were: in Tbilisi - 20-50 GEL (9 - 23 USD) per service (39.3%) and in Batumi – 10-20 GEL (4 - 9 USD)[8] (40.1%). Total monthly income from this occupation for the vast majority of MSM in Tbilisi is more than 1000 GEL (460 USD). In Batumi, though, the most frequent reported total monthly income is up to 50 GEL (23 USD), indicated by 31.6% of respondents.

More than half (68.9%) of those engaged in commercial sex in Tbilisi and big majority – 92.5% - in Batumi said they used a condom during their last anal intercourse with the client. In Tbilisi, about one third of respondents reported using condoms sometimes during the last 12 months with their clients.In Batumi, majority did not respond to the question about consistency of condom use at the last AI with the client during the last 12 months.

In Tbilisi 18 MSM and in Batumi - 9 said they had regular commercial clients. With those, in Tbilisi, all respondents reported condom use during the last AI, and in Batumi this response was give by 6 MSM.

[8]According to average exchange rate of the National Bank of Georgia for the fieldwork period in 2015.

However, consistent condom use was not reported by Tbilisi respondents, and in Batumi – only by 4 MSM.

Group Sexual Practices

Slightly more than one third of MSM in both cities were ever involved in group sex and out of those majority (74% in Tbilisi and 67.1% - in Batumi) reported participation in the group sex during last year. Involvement in only male group sex is the most prevalent practice, however, in Tbilisi mixed groups arealso mentioned by about one third of respondents. As for condom use,in Tbilisi 37.3% used condom at last group sex; for Batumi this indicator is much higher – 86.2%.

Condoms and Lubricants

Vast majority (98.6% in Tbilisi and 97% in Batumi) of MSM know where to get condoms and the most frequent response about the places to get condoms is pharmacy. Slightly more than half (54.2% in Tbilisi and 57.5% in Batumi) received condoms from preventive programs during the last year.

Majority of MSM (90.6% in Tbilisi and 92.1% in Batumi) are aware about lubricants. Of them, majority also knows where to obtain them. About 60% mentioned use of lubricants during the last AI and up to one third used lubricants consistently during AI. Pharmacies and NGO Tanadgoma was mentioned as main places to obtain lubricants.

Sexually Transmitted Infections (STI)

Vast majority (88.8% in Tbilisi and 99.6% in Batumi) were aware of Sexually Transmitted Infections. The respondents were further asked to list STI symptoms. More than 80% at both survey sites were able to mention at least one STI symptom.

More than half of MSM (55.8% in Tbilisi and 60.2% in Batumi) reported taking any STI test during the last 12 months. More than one third of respondent in Tbilisi – 39.4%, and even more – in Batumi (62.4%) reported never being tested for STIs during their lifetime, listing “no need for testing and knowing one is healthy” as a main reason.

With regard to STI experience in the last 12 months 24.5% in Tbilisi and 35.6% - in Batumi reported having some STI symptoms.

Among those who had ever been tested for STIs, majority named prevention as a main reason for testing; about one fourth undertook testing after the appearance of symptoms. More than 95% were

aware of their test result. When asked about their actions during the symptomatic period,73.6% of Tbilisi MSM referred to a health facility, 66.2% reported they did not have sexual intercourse, 60.5% informed their sexual partners about their STI symptoms. Condom use was reported by 12.1% and only 8.3% applied self-treatment during STI symptomatic period. In Batumi the breakdown of actions during the symptomatic period is different: 43.5% referred to a private doctor at home, 27.7% - referred to a health facility; 41.9% informed their sexual partners about their STI symptoms; 20.5% reported they did not have sexual intercourse. Only one Batumi respondent mentioned using condoms during the symptomatic period.

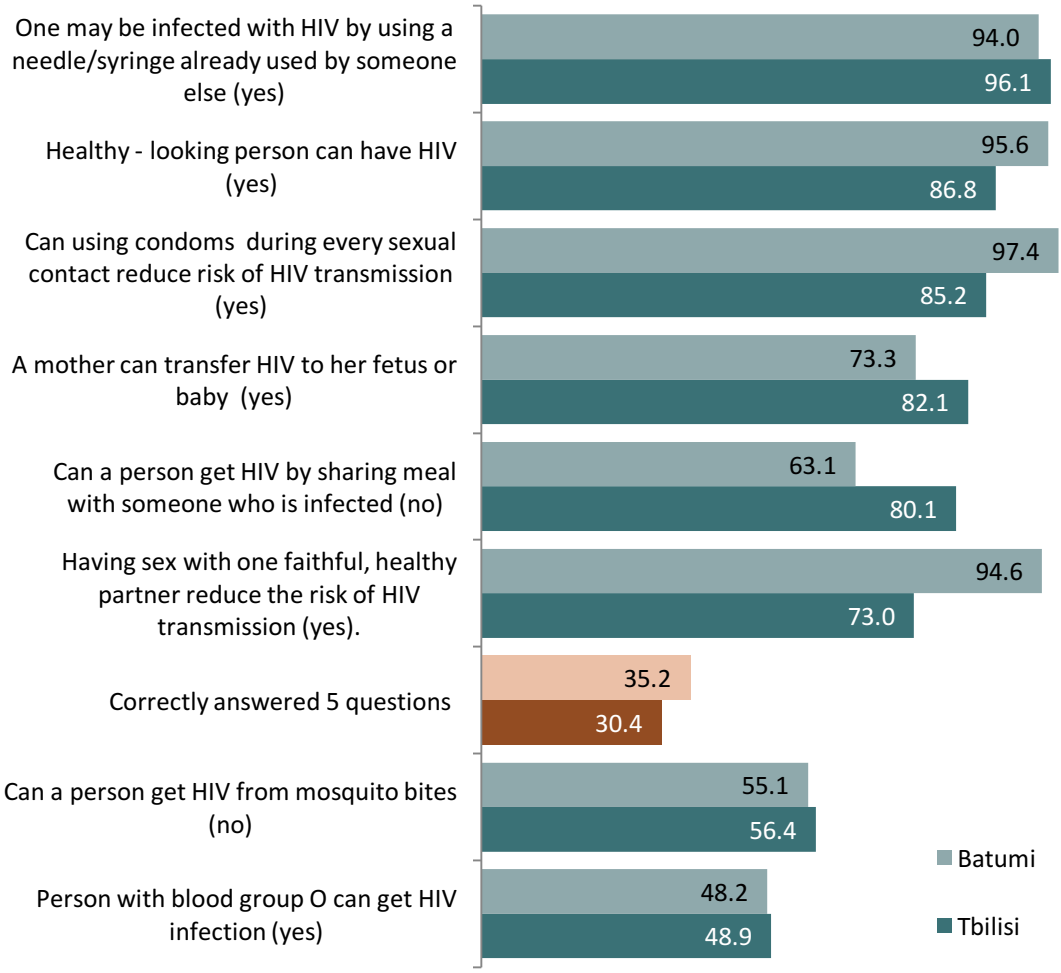
Knowledge / opinions and attitudes towards HIV/AIDS

Majority of the interviewed MSM (88.9% in Tbilisi and 86.9% in Batumi) were aware of HIV/AIDS. About one third of the respondents in Tbilisi (30.4%) correctly answered all 5 questions according to the Global AIDS Response Progress Report (GARPR) indicator on knowledge of HIV prevention.[9]In Batumi this indicator reached 35.2%. Although majority correctly cited ways of HIV transmission and preventive measures, misconceptions about HIV transmission on mosquito bite and blood group 0still exists among MSM, about half could not give a correct answer to these questions.

The Figure 7 below shows the proportion of MSM who responded correctly to each of the knowledge questions:

[9]Having sex with one faithful, healthy partner reduce the risk of HIV transmission (yes); Can using condoms during every sexual contact reduce risk of HIV transmission (yes); Healthy - looking person can have HIV (yes); Can a person get HIV from mosquito bites (no); Can a person get HIV by sharing meal with someone who is infected (no).

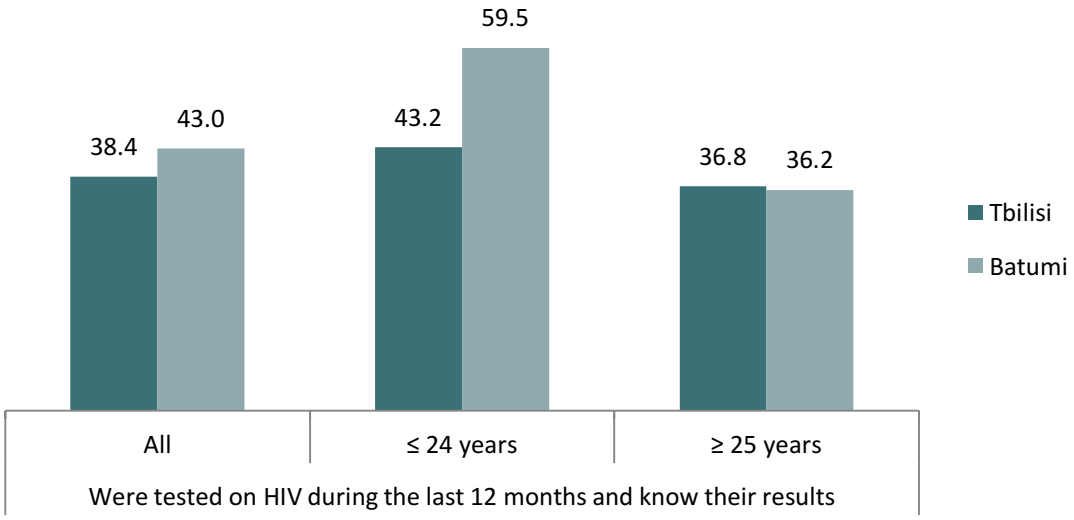
Figure 7: Knowledge on HIV/AIDS prevention



Majority of interviewed MSM (76.9% in Tbilisi and 82.7% in Batumi) knew where to get HIV test. However, their testing practice did not correspond with this knowledge. One third (30.3%) in Tbilisi and more than one third (38.5%) in Batumi were never tested for HIV at all. However, high proportion of the interviewed in both cities –67.9% in Tbilisi and 80.6% in Batumi - was tested during the last 12 months and the remaining was tested prior to that.

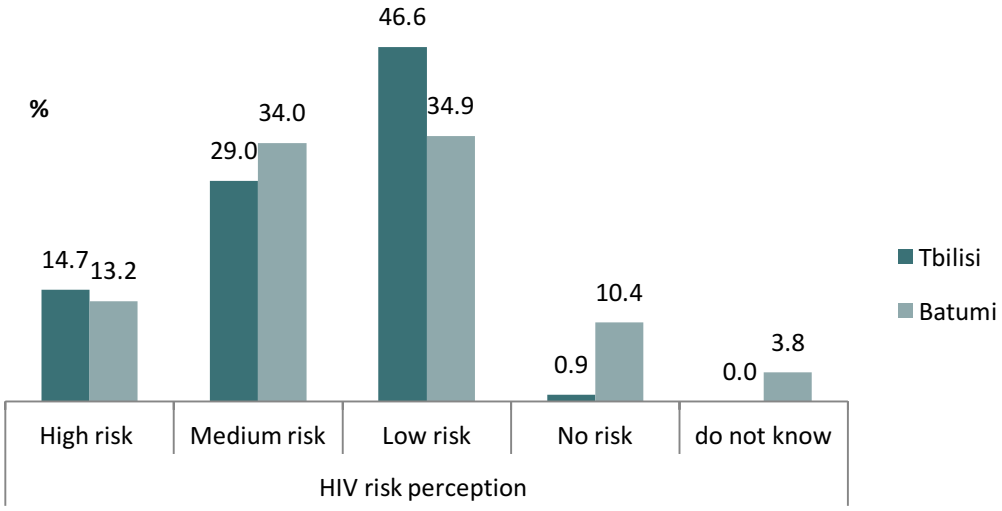
The GARPR indicator of being tested during the last year and knowing the results of the test has reached 38.4% in Tbilisi, and is slightly higher in Batumi – 43%.

Figure 8: Were tested on HIV during the last 12 months and know their results



It is also important to note at both survey sites not more than 15% assessed their personal risk regarding HIV infection as high, up to 35% believed they are at medium risk and 10.4% in Batumi perceived no risk at all.

Figure 9: HIV risk perception



Violence

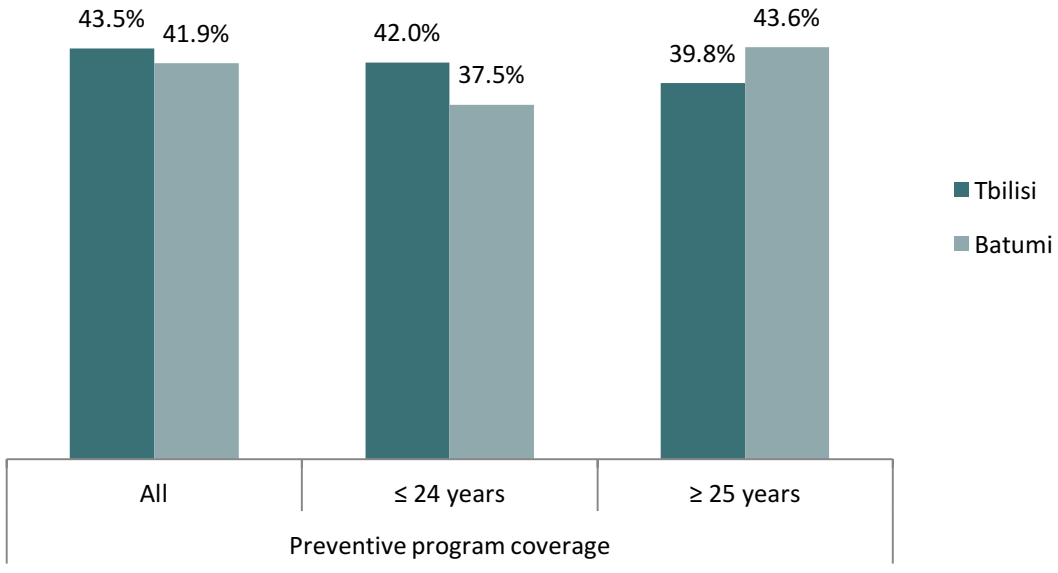
From the interviewed MSM 32% in Tbilisi and 4.7% (7 cases) in Batumi reported they had experienced violence because of sexual orientation or sexual behaviour in the last 12 months. It is noteworthy that in Batumi the rest 95.3% did not respond to this question. Out of the reported cases in Tbilisi, the majority were verbal assaults (83.5%), followed by physical (43.2%) and sexual violence (3.8%). As for 7 Batumi cases, 4 out of them were physical violence.In majority of the cases the perpetrator of the violence was a stranger,in the rest of the cases a family member/relative and others.

Program coverage / Media

The respondents who were aware of HIV/AIDS or STIs were asked to list all sources of information on these diseases. NGOs were listed as a primary source of information in Tbilisi (39.5%), followed by Internet (38.8%) and friends (35.9%). As for Batumi, primary sources were Internet (48.7%), friends (46.5%) and NGOs (43.4%). Among the trusted sources were listed: In Tbilisi – NGO representatives (50.8%), booklets (31.7%) and Internet (27.6%); in Batumi –NGO representatives (44.9%) and Internet (24.6%).

The respondent was considered to be covered by preventive program interventions if a) he knew where to go for HIV testing and b) he had received a condom during the last 12 months. Forty four percent of respondents in Tbilisi and about 40% in Batumi were covered by preventive program.

Figure 10: Preventive program coverage



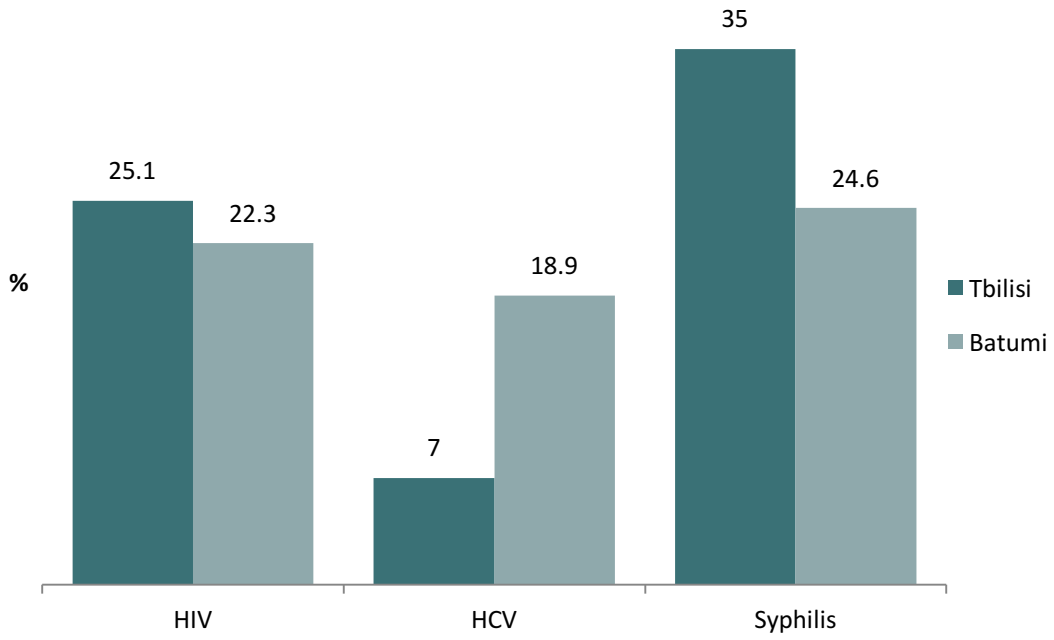
Biomarker

Blood samples for testing on HIV infection, Syphilis and Hepatitis C were taken from all survey participants. The results show that 25.1% of MSM in Tbilisi and 22.3% - in Batumi were HIV positive. HIV prevalence is higher among older age group in both cities.

Syphilis was detected in 35% of the MSM in Tbilisi and 24.6% - in Batumi.

As for Hepatitis C prevalence, it was found as 7% in Tbilisi and 18.9% - in Batumi.

Figure 11: HIV, Syphilis and Hepatitis C



The characteristics of the HIV positive MSM is given in theTable 4. Their majority is of 25-34 years of age, not married and have not used injecting drugs during the last 12 months. According to their sexual behaviour report, majority used condom during the last AI, however, consistent condom use rate is relatively low.

Table 4: Characteristics of HIV positive MSM

Key indicators	Tbilisi	Batumi
Socio-demographic characteristics	n/N	n/N
Age (years)		
<=24	20/65	6/21
25-34	30/65	8/21
>=35	15/65	7/21
Married	6/65	3/21
Drug injected during the last 12 months	0/65	0/21

Key indicators	Tbilisi	Batumi
Sexual behavior		
Median anal/oral partners in the last 12 months	6	9
Used condom at last anal intercourse (AI)	42/65	17/21
Consistent condom use during AI in the last 12 months	20/65	10/21
Used condom at last AI with regular partner	29/65	12/21
Used condom at last AI with occasional partner	33/65	12/21
Used condom at last intercourse with male client	13/65	5/21
Used condom at last intercourse with female partner	26/65	5/21
Test for STIs		
Ever tested for STIs	47/65	17/21
Never tested for any STIs	18/65	4/21
Test for any STI in the last 12 months	35/65	14/21
Test for HIV		
Ever tested	47/65	11/21
Never tested	13/65	7/21
Received HIV test last year and know their results	34/65	9/21
Syphilis		
positive	35/65	15/21

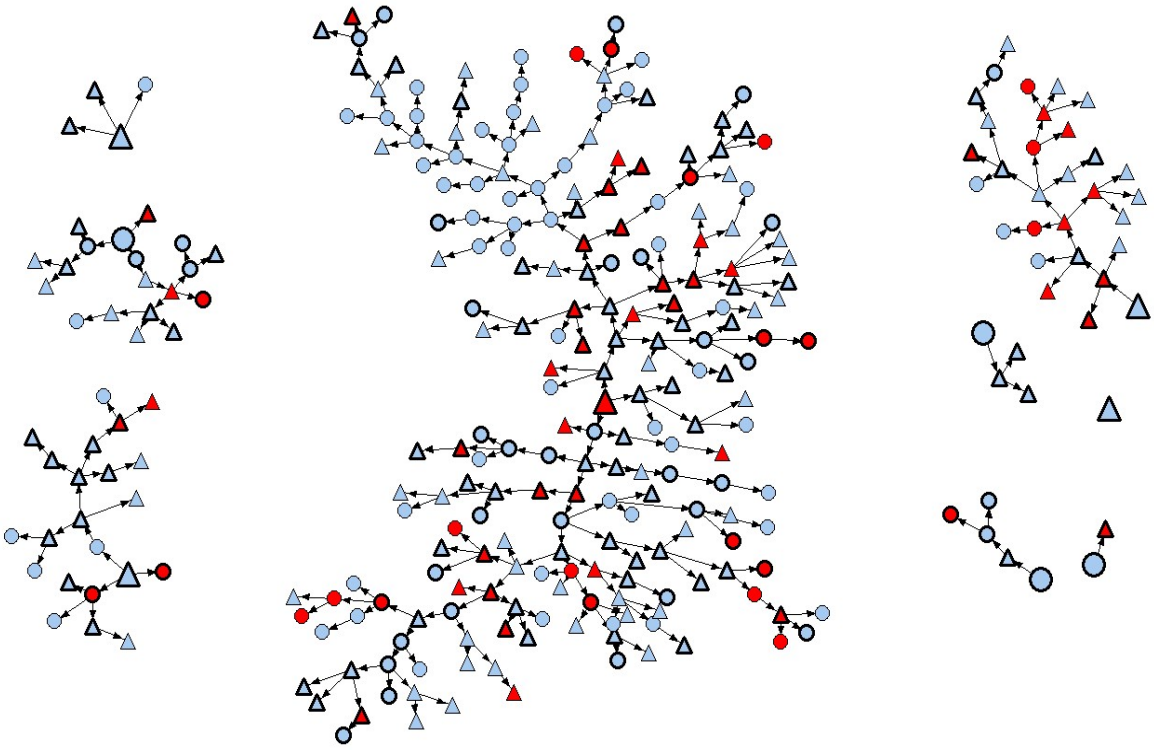
Recruitment pattern by risk sex behavior, prevention programs coverage and HIV status

The figures below represent recruitment patterns of MSM in Tbilisi and Batumi by risk sexual behavior, prevention program coverage and their HIV status. Risk behavior was defined if MSM did not use condom consistently with any anal sexual partnerduring the last 12 months.

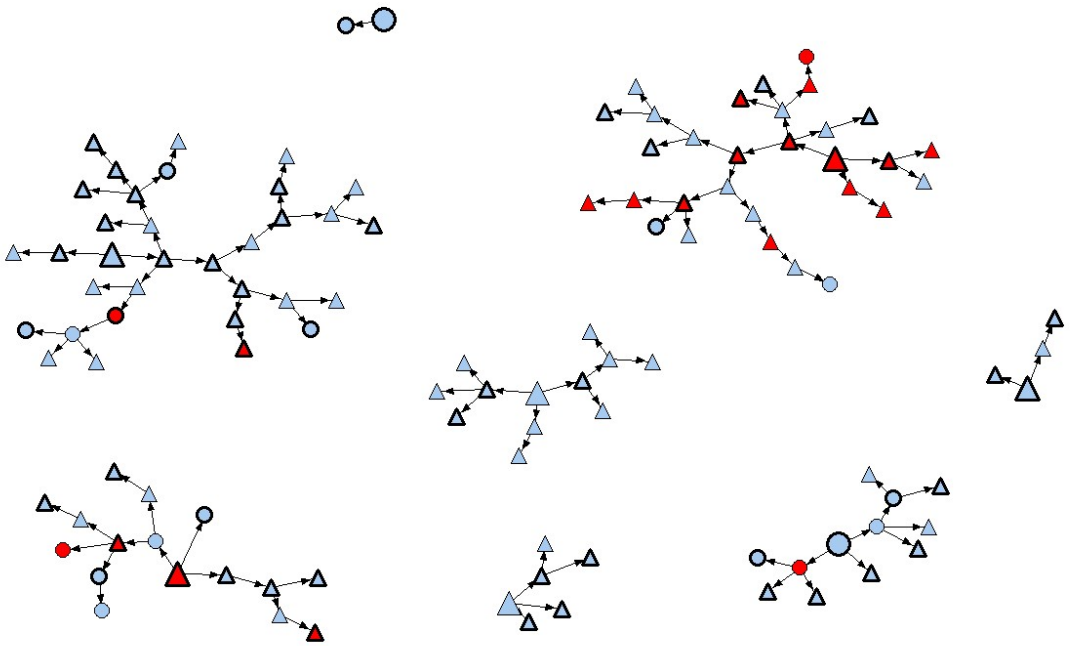
On the picture below larger symbols represent seeds and smaller symbols represent subsequent recruited MSM. HIV positivity, condom use and prevention programs' coverage are indicated as follows:

HIV+	Symbols are red
Condom use at last AI	Triangle
Prevention programs coverage (Know where to get HIV test and received condoms from preventive programs in the last 12 months)	Symbols with the bold shape

Picture 1: Recruitment chain of Tbilisi MSM



Picture 1: Recruitment chain of Batumi MSM



Study Limitations

The findings of the survey should be interpreted in the light of certain limitations:

- **Sampling bias.** One advantage of the RDS method is that it is based on recruiting people from their networks, as it is impossible to make sampling frames of high-risk groups. However, there are several potential sources of error and bias in RDS. These include the influence of non-response bias, selection of seeds, and others. Although original seeds in the presented study were quite diverse, still a comparison of the seeds versus the final sample shows that RDS resulted in different characteristics of the final samples.Study managed to recruit MSM mainly from the lower socio-economic layer. Majority of the study participants had small monthly income; therefore the study incentives were attractive to them. However, current Tbilisi sample was more diverse in terms of monthly income, compared to the sample of 2012.
- **Reporting bias.** As in any interview-based survey, it is possible that respondents may not have accurately answered some of the sensitive questions, or may have had difficulties in recalling information. Due to social stigma, some behaviors, e.g. group sex, engagement in commercial sex may be under-reported, while condom use may be over-reported by the respondents. Since all interviews were conducted in private places, the survey was anonymous and personal identification details were not collected, it is expected that this might minimize reporting bias.
- **Batumi sample sizeunder-reached.**One more limitation of this study is that it was not possible to reach the desired sample size in Batumi. Field work was extended for more 2 weeks, as it is provided in the literature, but with no result. In addition to this some members of this KP were interviewed (using qualitative interview guides)in order to investigate the reasons for no participation in the study. Interviews revealed that there are three major factors that affect participants' decision: 1) High stigma - they are afraid that their status will be identified, 2) lack of free time – the majority of the study participants were occupied and did not have time to participate in the study, and 3) high migration rate.

Conclusions and Discussions

Overall, the Bio-BSS findings provide valuable data regarding the presence of HIV and risk behaviours among the key populations at increased risk of exposure to and transmission of HIV in Georgia.

Comparative analysis across the years allows measuring changes and gives directions for future focus of preventive strategies. The first round of the Bio-BSS among MSM in Tbilisi was carried out in 2007 that yielded 140 respondents, subsequent wave in 2010 recruited 278 participants and the one in 2012 - 218 participants. In the survey of 2015 a new survey location – city of Batumi was added. In total, current study recruited 300 participants in Tbilisi and 115 – in Batumi.

This section provides comparisons of key indicators of the survey in Tbilisi with the previous surveys (2012 and 2010). However, as in 2012 the equilibrium was not reached, it was not possible to analyze the results with RDSAT and data are not comparable to 2015, unless 2015 data are calculated with SPSS too. Based on this, in the section below two kinds of comparison is provided:

- Comparison of all weighted data from Tbilisisampleof 2010 with 2015 (both done through RDSAT tool), demonstrating trends over the last 5 years;
- Comparison of GARPR indicators of 2012 with 2015 (both calculated with SPSS), demonstrating changes during the last 3 years.

Finally, the researchers conducted bivariate and multivariate analysis to identify factors contributing to HIV positivity and condom use.

Socio-demographic characteristics

The socio-demographic structure of Tbilisi MSM population studied in 2015 (both in Tbilisi and in Batumi) is close to that studied in Tbilisi in 2010. Median age is 28 (in 2010 it was 29); Majority has received elementary/secondary education, followed by higher education; Majority has been never married; Majority is Georgian by nationality and represent mainly lower socio-economic layer of MSM population. However, there is a change in Tbilisi sample: in 2015 bigger proportion of Tbilisi MSM report having permanent job compared to 2010 (43% vs. 28.2%). Also, 2015 survey managed to recruit more diverse sample in terms of economical status. The monthly income for majority (about 60% of the respondents) in Tbilisi does not exceed 500 GEL (230 USD) – that is lower compared to 2010 (76.1% in 2010),. In Batumi the study recruited less MSM with the same economical status – proportion of those with the income less than 500 GEL is about 53%.

The recruitment process in the current and 2010 surveys managed to bring into the survey MSM mainly

from the lower the socio-economic layers – those with a low income. Hence, the survey findings illustrate characteristics of the lower socio-economic segment of this population.

Alcohol and drug use

Alcohol and drug use are considered to be risky behaviours connected with HIV transmission. However, current study, similar to that of 2010, as well as study at the new survey location - Batumi, did not find high percentages of heavy alcohol use (everyday use) or injecting drug use. In Tbilisi about one fifth of respondents report everyday alcohol use, Batumi this proportion is much lower. The current study investigated also alcohol influence on condom use. In Tbilisi 65.4% and in Batumi – 48.2% of respondents reported having had sex under the influence of alcohol during the last 12 months and consistent condom use was reported by half (49.7% in Tbilisi and 43.5% in Batumi). Also, like the previous surveys, this one found very small percentage of injecting drug use among the surveyed MSM. It should be noted that none of the HIV positive MSM reported injecting behaviour.

As proved by last three surveys alcohol use, and especially drug use is not widespread among MSM. Two high risk groups – MSM and PWIDs – hardly overlap and the infection does not travel from one most-at-risk population to another. Having sexual contacts under alcohol is common, and condom use rates in these cases are quite low.

Sexual behavior

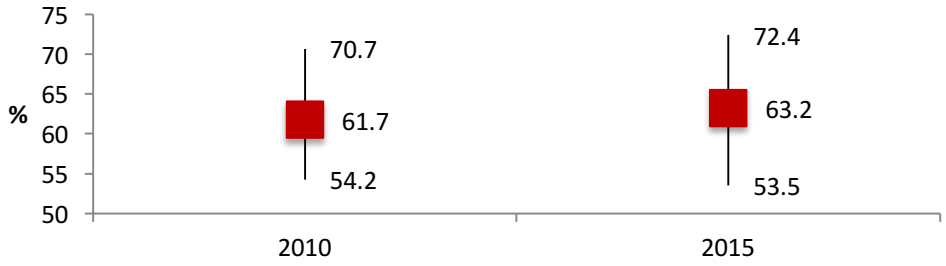
The MSM had several types of both male and female partners.

Sexual Behavior with male partners

The median number of male partners (anal/oral partners) in the last 12 months was 6 in Tbilisi and 5 – in Batumi. Tbilisi number is higher than that of 2010.

Condom use at last AI reported in 2015 is 63.2% in Tbilisi - slightly higher compared to 2010 without statisticaly significant diference. (see Figure: 12)

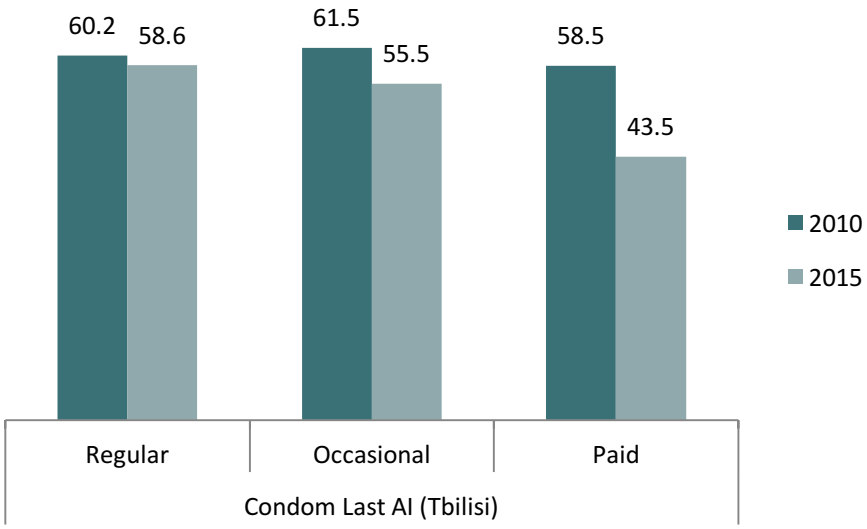
Figure: 12 Condom use at last AI in 2010, 2015, Tbilisi (sample sizes 269 and 276 respectively)



There is reduction of condom used with all types of partners during last intercourse however the change is statistically non-significant. Oral sex remains less protected compared with anal sex; no significant change in condom use pattern during oral sex was observed. It is noteworthy that Batumi respondents reported much higher condom use rates during both anal and oral intercourse.

Condom use practices have not changed during the last 5 years. Overall, condom use with various types of partners is not very low, but still is not at satisfactory level.

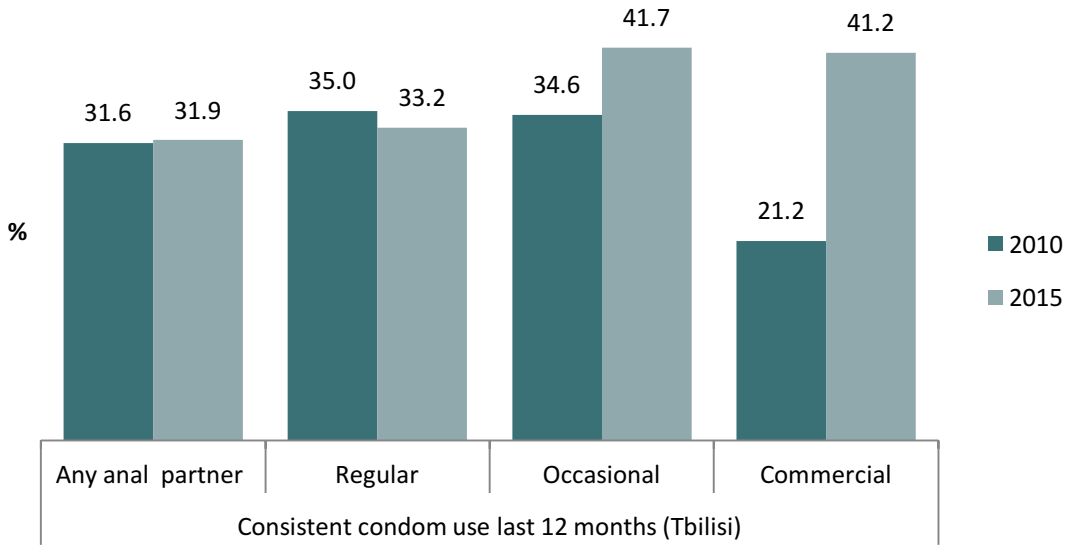
Figure 13: Condom use at last AI with different types of partners in Tbilisi by years



Consistent condom use is less prevalent than last AI condom use. This pattern is well documented in the literature.[16,17]MSM generally tend to have more protected sexual practices with occasional than with regular partners, however our study did not show that. Condom use at last AI and consistent condom use did not differ between regular and occasional male partners. Changes in the consistent condom use rates from 2010 to 2015 are statistically non-significant.

Condom use practices - both condom use at last AI and consistent condom use with different types of partners - have not changed during the last 5 years. Consistent condom use is lower than condom use at last AI, but remains around 30%.

Figure 14:Consistent condom use at any anal and different types of partners in Tbilisi by years



Group sex experience and involvement in commercial sex

Particularly high risk behaviour such as engagement in group sex activities was reported by 32-35% of MSM in both cities. Tbilisi rate has almost doubled. Out of those who had group practices slightly more than one third in Tbilisi used condom at last group sex, which is lower compared to 2010. As for Batumi, condom use during the group sex is very high.

Engagement in commercial sex was reported by a much lower proportion of respondents – 8.3%, compared to 2010 - 28.9%. This could be explained by increased migration of MSM sex workers to neighbouring countries for sex work. Also, the study managed to recruit more diverse groups of MSM compared to earlier studies. In Batumi engagement in commercial sex was reported by 10.2%. It should be noted that out of those engaged in commercial sex big proportion does not consider themselves sex workers. Condom use rates at last AI with the client was 68.9% and did not show any change from 2010 (around 65% in 2010). In Batumi, though, as in case of other sexual behavioural patterns, condom use with the last commercial client was higher than in Tbilisi – 92.5%.

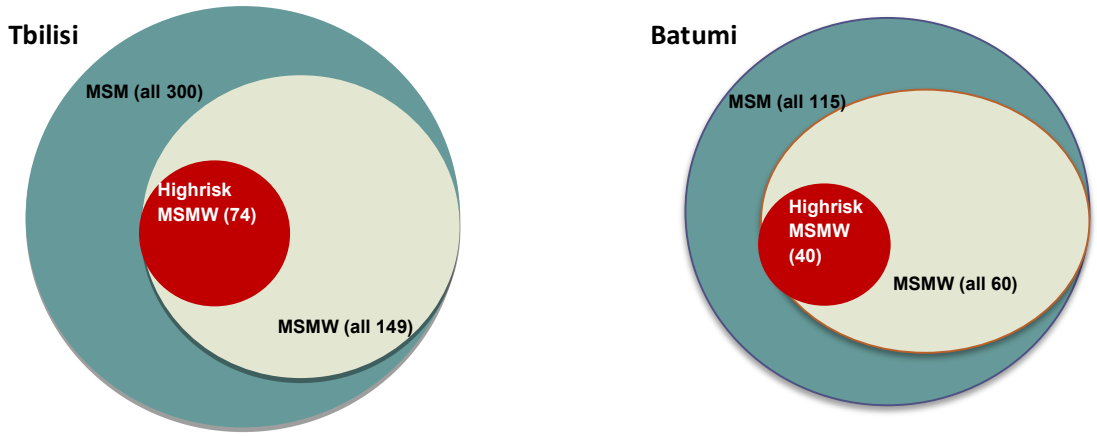
Sexual behaviour with males and females

At both survey sites overall more than 70% of MSM reported having a female sex partner (regular, occasional or paid) in the past year. Compared to the 2010 survey findings (62.2%, respectively) in this survey higher proportion claimed to have female partners.The latest regional analysis of 2010 showed that proportion of MSM who had sex with women during the last 12 months varied from 21% in Belarus to 47.1% in Georgia.[18]Georgia figures were based on 2007 survey findings. In general, such high rate of bisexual activity could be explained by social pressure and stigmatization of homosexual behaviour. MSM might engage in sexual relationship with women to dispel any doubts about their homosexuality.

High rates of reported sexual activity with women could also reflect social desirability bias. Still, this is a fact that needs a more in-depth qualitative investigation.Similar to 2010 study, current survey results revealed behavioral factors that create ground for HIV/STI transmission from MSM to their female partners. Since 2010 there is increase in condom use at last sex with female partners (from 57.8% to 71.2%) in Tbilisi. As for Batumi, this rate is also high – 65.9%.

Overall 168 MSM in Tbilisi and 60 MSM in Batumi mentioned having sex with female partners during last 12 months. To compare condom use practice with males and females at last intercourse we analyzed the sub-sample of MSM whohad female partners and reported having AI with males as well (149 MSMW in Tbilisi and 60 MSMW in Batumi). The analysis revealed almost the same proportion of condom use at last intercourse with male (67.1%) and female (67.8%) partners in Tbilisi. While in Batumi 88.3% used condoms with males and 70% of them had protected sex with females at last sex. MSMW who had protected last intercourse both with males and female partners in Tbilisi and Batumi were 49.7% and 66.7%, respectively.

Figure 15: Inconsistent condom use with male and female partners



Researchers conducted multivariate analysis to check which factors could be contributing to condom use at the last AI. Factors included in the regression were: age, being tested on HIV and knowing results, risk perception, number of male partners, preventive program coverage, HIV positivity, Having an STI, and city of residence. None of the factors listed were revealed as contributing to the condom use at last AI except city of residence. The analysis revealed that Batumi residents are 2.74 times more likely to use condoms at last AI compared to Tbilisi residents (p=0.001).

The study showed high sexual activity among MSM. Risky sexual practices are quite widespread: The MSM reported a large number of different types of partners, both male and female, insufficient and in some cases decreased use of condoms, especially their consistent use with any type of male and female partners and involvement in group sexual practices often without condoms. High risk practices have not changed and in some cases have worsened over the last five years. These tendencies are reflected in the HIV prevalence increase and, besides, raise concerns about the potential bridging role of MSM in HIV transmission to general population.

Lubricants and condoms

Awareness about the lubricants has improved vastly in Tbilisi and is also high in Batumi. MSM are also aware of where to get lubricants. About 60% mentioned use of lubricants during the last AI and up to one third used lubricants consistently during AI. These are higher indicators compared to the previous surveys, which can be explained by provision of free lubricants by preventive programs, started since 2014.

Vast majority of MSM know where to get condoms and pharmacies are the most frequently named places. More than half of respondents (54.2% in Tbilisi and 57.5% in Batumi) received condoms from preventive programs during the last year. There was a slight increase in the proportion of MSM who reported receipt of condoms from preventive programs during the last 12 months in Tbilisi from 40.3% in 2010 to 43.5% in 2015.

Much more MSM are aware about lubricants and mention places where to obtain them, lubricant use has also increased, due to improved access. Awareness on places of condom supply is high among MSM, and proportion of MSM received condoms from preventive programs has slightly increased since 2010.

Sexually Transmitted Infections

The majority are aware of STIs and are able to list at least on symptom in men. More than half of MSM (55.8% in Tbilisi and 60.2% in Batumi) reported taking any STI test during the last 12 months.Tbilisi data show increase in STI test uptake, compared to 29.4% in 2010.

Knowledge about STIs is quite high. There is increase in STI testing uptake among MSM in Tbilisi. In Batumi STI testing practices are also high.

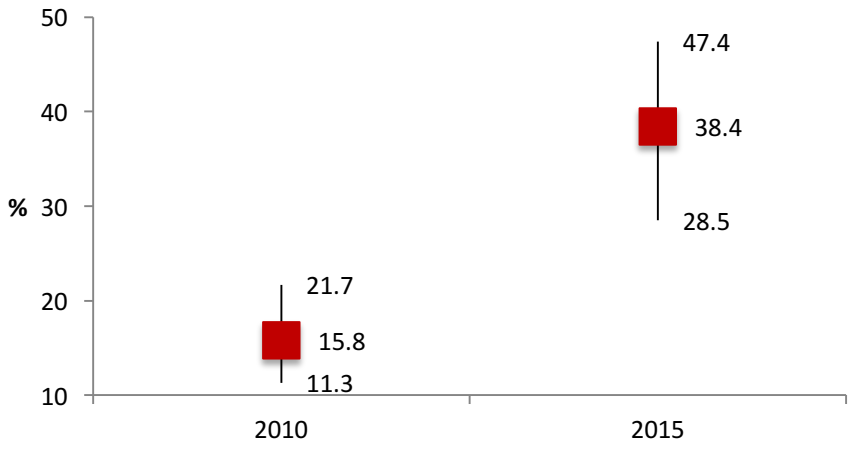
Knowledge / opinions and attitudes towards HIV/AIDS

Although HIV/AIDS awareness is high, not all MSM are aware of this disease both in Tbilisi and in Batumi. Analysis of Global AIDS Response Progress Report indicator on HIV knowledge showed

significant improvement in Tbilisi since 2010 - from 19.9% in 2010 to 30.4% in 2015 (p (2tailed) , 0.001). In Batumi this indicator was measured the first time and reached 35.2%.

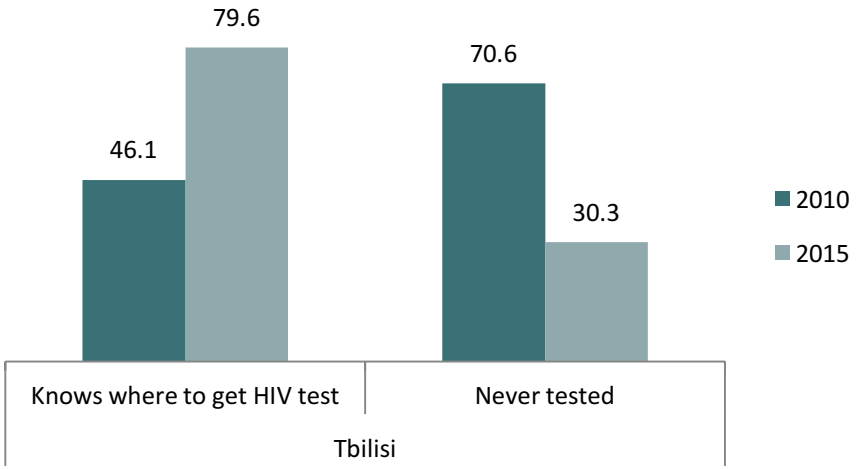
During the recent five years there is statistically significant improvement in MSM awareness where to get HIV test in case of necessity ($p < 0.01$), as well as in the proportion of MSM who were tested during the last 12 months and received results.

Figure: 16 MSM rates who were tested during the last 12 months and received results in 2010, 2015, Tbilisi (sample sizes 278 and 300 respectively)



Lower percentage remains untested from the whole survey cohort (70.6% in 2010 and 30.3% in 2015) and this change is also statistically significant ($p< 0.01$). Increase in HIV testing uptake is statistically significant ($p< 0.01$), demonstrating a steady positive trend in behaviour of MSM. This can be explained by sustainable use of HIV rapid (finger prick) testing in the outreach under preventive programs, which makes HIV testing easily accessible to the target group.

Figure 17: HIV testing practices in Tbilisi, by years



Not more than 15% assessed their personal risk regarding HIV infection as high, up to 35% believed they are at medium risk and 10.4% in Batumi perceived no risk at all.

Knowledge about HIV infection is high and has improved over the last years, but this does not improve personal risk perception among MSM. HIV testing uptake is improving gradually, however this does not lead to safer sexual behaviour.

Violence

From the interviewed MSM 32% in Tbilisi and 4.7% (7 cases) in Batumi reported that they have experienced violence because of sexual orientation or homosexual behaviour in the last 12 months. In Tbilisi violence rate has increasedsignificantly compared to 2012 (comparison of SPSS calculated data, (*p* – 0.00). It is important to note that massive attacks on LGBT activists and their supporters in May 2013 contributed to increase in negative attitudes as well as aggressive actions towards persons with homosexual orientation and/or behaviour. This could be the main reason of increased violence reports.

Violence because of sexual orientation exists and increases.

Program coverage / Media

NGOs, internet and friends seem to be the major and best way for conveying messages to MSM. In 2010 TV was in the first place among trusted sources, however, in 2015 this source has lost its credibility.

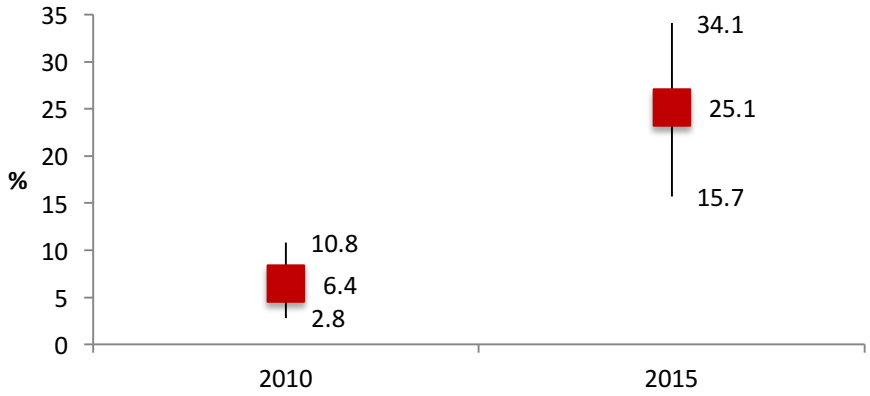
Coverage by preventive intervention measured by awareness of where to get a HIV test and receipt of a condom during the last 12 months increased from 20.9% in 2010 to 43.5% in 2015 in Tbilisi. This increase was statistically significant (*p* (2tailed) < 0.001).In Batumi coverage is already quite high – about 40%.

Coverage by preventive programs has been gradually increasing during the last 5 years. New HIV prevention interventions introduced since 2010 and especially since 2014, as well as strengthened LGBT community organizations should have played a positive role in coverage increase.

Biomarker

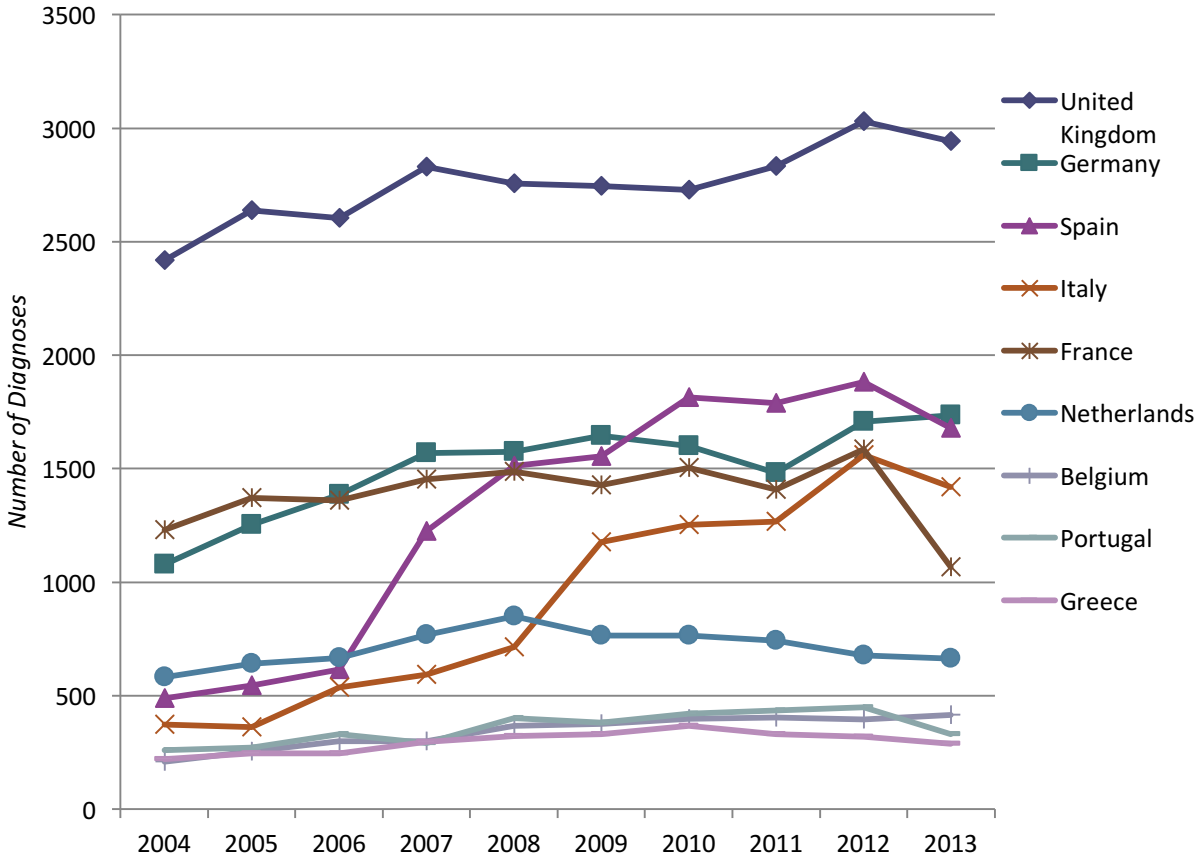
The most alarming finding of this study is increase in HIV prevalence in Tbilisi from 6.4% in 2010 to 25.1% in 2015. The changes since 2010 up to 2015 are presented on Figure 18. During last five years we observe three-fold increase of HIV prevalence. Batumi HIV prevalence is also very high – 22.3%. As for syphilis, its prevalence is quite high but does not show difference compared to 2010 results. Hepatitis C prevalence has not been measured since 2010, when it was up to 17% in Tbilisi. This time it was found as low as 7% in Tbilisi but much higher in Batumi - 18.9%.

Figure 18: HIV prevalence rates in 2010, 2015, Tbilisi (sample sizes 271 and 300 respectively)



Increasing trend of HIV cases among MSM in Georgia is comparable to other countries worldwide. MSM make up the predominance of prevalent HIV cases in the United States, Canada, The European Union, Australia and New Zealand.[19,20,21,22,23] European CDC data showed that an HIV diagnosis in men infected through sex with men is increasing annually in almost all Western European countries. The United Kingdom and Germany are in the leading position. Between 2006 and 2010, the annual average number of diagnoses linked to MSM per million people was 43.4 - highest in the United Kingdom, 43 in the Netherlands and 37.3 in Spain.[24] Epidemics of HIV in MSM continue to expand in Eastern Europe and Central Asia and as well. Reporting of HIV cases show that MSM was reported for 36% of all HIV diagnoses in the West and 22% in Eastern Europe.[24] Moreover, the MSM are the only key population that has not seen a decline in new infection, despite efforts by countries to deliver prevention services. The rising number of cases among young MSM is of particular concern suggesting that current prevention efforts may not be having necessary impact.[25]

Figure 19: HIV diagnoses in men infected through sex with men in Western Europe (2004-2013)



Source: ECDC

Analysis of HIV positivity among our study population (controlled for age, condom use at last AI, being tested on HIV and knowing results, number of male partners, preventive program coverage, and city of residence) does not reveal determining factors. However it is well known from the literature that risks for HIV infection among MSM have been shown to be unprotected receptive anal intercourse, high frequency of male partners, high number of lifetime male partners, high frequency of male partners, injection and non-injection drug use and high viral load in the index partner Recent evidence suggests that HIV infection in MSM is heavily biologically determined, requiring that programmatic efforts should acknowledge this realities.[23]

HIV prevalence increase has shown steady and alarming trend among MSM in Tbilisi, similarly high prevalence is found in Batumi. Number of HIV infected MSM is increasing, hence, there is necessity to implement prevention strategies that are evidence based and are informed by realities of HIV transmission risks for MSM.

Recommendations

The following recommendations are proposed based on the findings of this study:

1. Increase coverage of MSM by preventive interventions aiming at risk behaviour reduction and HIV risk transmission reduction. The interventions should continue to include, but not be limited to, condom and lubricant distribution, awareness raising and STI/HIV testing:

a) Apply various approaches to increase accessibility of HIV-related preventive services such as outreach, individual counselling, internet-based & community-based interventions and peer education or similar peer-based interventions

b) Expand MSM-friendly STI/HIV testing services

c) Recommend HIV testing to males attending the STI/genitourinary clinics

d) Reinforce safer sex messages, especially on the importance of protected sex

e) Design specific interventions to address risks undertaken by young MSM

f) Implement positive prevention strategies among HIV positive MSM

g) Continue and expand HIV rapid testing provision at the sites of MSM gathering

2. Focus on reducing HIV-associated as well as homosexuality-associated stigma and discrimination.

3. Conduct regularly non-coercive, anonymous, ethical and systematic surveillance of both behavioral and selected biological markers among MSM also in other locations, in order to monitor the prevalence dynamics of HIV infection and other STIs.

4. Ensure active recruitment in the following rounds of the survey through a) introducing more attractive incentive system and b) adding testing for various STIs in the biomarker component

5. Conduct size estimation studies with improved innovative approaches to reach other hidden, stigmatised, or otherwise hard-to-reach population.

Annex 1. Data Tables

Network recruitment	Tbilisi		Batumi	
Participation in earlier studies	% *	n/N	% *	n/N
2007	4.7	14/300	1.7	2/115
2010	8.7	26/300	1.7	2/115
2012	22.7	68/300	3.5	4/115
2007 &2010& 2012	4.0	12/300	0.9	1/115

** Calculated in SPSS*

Socio-demographic characteristics	Tbilisi		Batumi	
	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
Socio-demographic characteristics				
Age				
≤ 24	42.5 (32.9-51.3)	111/300	29.4(16.4-42.3)	35/115
25 – 34	32.3 (25.1-42)	103/300	43.3(29.3-57.3)	47/115
≥ 35	25.2 (16-34.5)	86/300	27.3(15.5-39.2)	33/115
Mean (minimum-maximum)	30.26 (18-73)	300	30.37(18-59)	115
Median	28.00	300	29.00	115
Education				
No education or Elementary	0.2(0-0.8)	2/300	--	0/115
Secondary	51.6(42.6-60.3)	160/300	58.1(42.6-73.6)	67/115
Incomplete higher	12.6(7.4-19.1)	32/300	7.8(-1.717.3)	8/115
Higher	35.6(27.4-43.2)	106/300	34.1(21-47.3)	40/115
Nationality				
Georgian	99.5(98.9-100)	297/300	99.2(98.3-100)	113/115
Other	0.5(0-1.1)	3/300	0.8(-0.2-1.7)	2/115
IDP status				
(Yes)	6.1(2.7-13.1)	20/300	2.8(-0.8-6.4)	4/115
Marital Status				
Married	7.7(3.9-11.8)	31/300	21.1(10-32.1)	22/115
Divorced / Separated	14.5(8.6-21.8)	49/300	13.9(5.1-22.6)	18/115
Widower	1.7(0-4.8)	2/300	2(-1-5)	2/115
Never married	76.2(67.7-83.7)	218/300	63.1(49.7-76.4)	73/115
Occupation				
Permanent Work	43(32.7-52.8)	114/300	47(33-61.1)	63/115

Socio-demographic characteristics	Tbilisi		Batumi	
	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
Temporary work	18.4(10-26.8)	51/300	14.5(5.8-23.2)	18/115
Student	0.8(0-2)	3/300	0.3(-0.2-0.9)	1/115
No occupation	37.8(30.3-47.5)	132/300	38.1(23.9-52.4)	33/115
Monthly Income				
≤ 100 GeL	20.3(13.6-28.3)	56/300	7.6(0.5-14.7)	10/115
100 – 300 GeL	20.6(13.7-28.3)	63/300	16.3(4-28.6)	9/115
300 - 500 GeL	22.1(14.5-29.7)	78/300	29(18.1-40)	34/115
500 -700 GeL	15.7(9.4-23.1)	42/300	15.1(5.7-24.5)	24/115
700 - 1000 GeL	11.3(4.7-19.3)	29/300	20.8(8.8-32.8)	21/115
≥ 1000 GeL	8(3.8-12.8)	24/300	11.2(4.2-18.2)	17/115
No response	2(0.3-4.4)	8/300	--	0/115

Alcohol and drug use	Tbilisi		Batumi	
	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
Alcohol use				
Drink alcohol every day	8.2(3.5-13.7)	25/300	0.2(-0.1-0.5)	1/115
Drug use				
Used non or injected drugs last 12 months	22.9 (15.7-30.6)	59/300	35.1(21.7-48.4)	46/115
Non-injection drug used during last 12 months	22.4 (15.3-30.1)	56/300	34.7(20.7-48.8)	45/116
≤ 24	42.7 (26.7-54.7)	33/111	30.1	13/35
≥ 25	12.4 (4.8-18.1)	23/189	36.6	32/80
Most frequently used drug (Marijuana)	82.8 (--)	44/59	97.6(92.5-102)	43/46
Drug injected during last 12 months	0.6 (0.02-1.3)	7/300	4.9(-1.5-11.3)	3/115
≤ 24	0(0-0)	0/300	0	0/35
≥ 25	1(0.2-2)	7/300	7	3/80
Mostly injected drug (Subutex)	0(--)	2/59	9.7(-2.7-22)	2/44
Injected with used needle/syringe during last injection	14.3*	1/7	--	0/3
Had unsafe sex with injecting drug user last 12 months	1.2(0.6-2.4)	15/300	0.6(-0.4-1.7)	1/115

** Calculated in SPSS*

Sexual behavior	Tbilisi		Batumi	
	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
Male partners				
Number of anal/oral partners in last 12 month				
1	19.9 (14.5-30.4)	51/300	14.6(4-25.2)	15/115
2 – 5	35.9 (24.1-41)	95/300	40.4(27.5-53.3)	46/115
6 – 9	12.1 (7.6-16.9)	39/300	14(5.8-22.3)	23/115
≥ 10	32.1 (25.2-42)	115/300	31(18.4-43.5)	31/115
Median anal/oral partners	6.00 *	300	5.0 *	115
≤ 24	5.00 *	111	5.0 *	35
≥ 25	6.00 *	189	5.0 *	80
Had anal intercourse during last 12 month	91.5(85-96.4)	276/300	100 *	115/115
Median anal partners	5.00 *	276	5.0 *	115
Median anal contacts last month	6.00 *	229	5.0 *	100
Used condom at last anal intercourse (AI)	63.2(53.5-72.4)	177/276	78.8(64.1-93.4)	95/115
≤ 24	62.5(49-75.4)	62/101	87	31/35
≥ 25	72.6(57.8-82.8)	115/175	75.3	64/80
Consistent condom use during AI in last 12 month	31.9(22.7-41.8)	78/276	47(32.9-61)	52/115
≤ 24	24.1(13.7-37.9)	25/101	57.1	18/35
≥ 25	36.9(24.4-50.3)	53/175	42.7	34/80
Had oral intercourse during last 12 month	79.4(70.5-85.9)	239/300	74.3(62.8-85.8)	84/115
Used condom at last oral intercourse	32.2(20.5-44.1)	92/239	66.7(50.1-82.7)	54/84
Regular male partners				
Had anal/oral regular partner in last 12 months	75.2(66.1-83.6)	234/300	92(83.3-100)	106/115
Median number of anal/oral partners	1.00 *	234	2.00*	106
Median number of anal partners	1.00 *	220	2.00*	106
Median number of anal acts last month	5.00 *	169	4.50*	88
Used condom at last AI	58.6(43.2-67.8)	127/220	67.8(55.3-80.2)	71/106
≤ 24	54.2(34.8-68.1)	46/85	89	24/31
≥ 25	60.8(32.3-63.6)	81/135	59.7	47/75
Consistent condom use during AI in last 12 month	33.2(22.2-43.1)	62/220	46.7(31.9-61.6)	47/106
≤ 24	34.5(18.6-45.8)	23/85	63.5	16/31
≥ 25	34.8(18.7-46.8)	39/135	40.2	31/75
Reasons for not using condom at last AI with regular male partner (Didn't think necessary)	37.1(1.7-51)	23/86	13.5(-3.2-30.3)	9/33
Occasional male partners				
Had occasional anal/oral partner in last 12 months	75.5 (67.6-83)	237/300	76.7(64-89.4)	87/115

Sexual behavior	Tbilisi		Batumi	
	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
Median number of anal/oral partners	5.00 *	237	5.00 *	87
Median number of anal partners	5.00 *	210	4.00 *	86
Median number of anal acts last month	3.00 *	131	1.00 *	52
Used condom at last AI	55.6(41.9-71.1)	143/228	83.6(69.4-97.7)	72/86
≤ 24	55.7(35.4-76.4)	49/85	95.9	22/26
≥ 25	60.7(43-76.6)	94/143	78.9	50/60
Consistent condom use during AI in last 12 month	41.7(27.6-54.5)	91/228	58.5(42-75)	50/86
≤ 24	36.7(19.3-58.2)	34/85	56.2	15/26
≥ 25	49.3(32.9-66)	57/143	59.3	35/60
Reasons for not using condom at last AI with occasional male partner (Did not have it)	14.5(0.6-24.9)	14/80	28.6 *	4/14
Paid male partners				
Had anal/oral paid partner in last 12 months	9 (4.3-14.5)	28/300	2.3(02-4.3)	5/115
Median number of anal/oral partners	3.00 *	28	4.00 *	5
Median number of anal partners	10.00 *	23	3.00 *	5
Median number of anal acts last month	10.00 *	11	4.00 *	1
Used condom at last AI	43.5(0-100)	17/23	71.8(33.1-110)	4/5
≤ 24	50.2(0-100)	5/5	100	2/2
≥ 25	17.3(0-81.1)	12/18	58	2/3
Consistent condom use during AI in the last 12 months	41.2(0-100)	11/23	71.8(35.4-108)	4/5
≤ 24	56(0-100)	3/5	100	2/2
≥ 25	24(0-67.7)	8/18	57.9	2/3
Reasons for not using condom at last AI with paid male partner (Refused to answer)	10.1(0-50)	3/6	100*	1/1
Engagement in commercial sex				
Had male client (received material reward for sex) in the last 12 months	8.3(4.1-12.8)	54/300	10.2(3.6-16.8)	17/115
Self-identified as sex worker	55.8(0.1-64.4)	27/54	37(4.2-69.9)	5/17
Median number of clients during a working day	2.00	51	1.00*	14
Cost of commercial sex service (GEL)				
10-20 GEL	33.4(0-99.6)	8/52	40.1(2.2-77.9)	4/17
20-50 GEL	39.3(0.3-51.4)	27/52	17.6(1.3-34)	6/17
50-100 GEL	27.3(0-76.8)	15/52	39(8.8-69.2)	6/17
More than 100 GEL	--	0/52	--	0/17
No response	0(--)	2/52	3.3(-15.4-22)	1/17
Monthly income from commercial sex service (GEL)				
Up to 50 GEL	0(--)	5/52	31.6(-18.9-82.1)	2/17

Sexual behavior	Tbilisi		Batumi	
	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
50-100 GEL	0(--)	5/52	6.2(0.1-12.4)	1/17
100-200 GEL	0(--)	7/52	1.4(-1-3.9)	1/17
200-300 GEL	0(--)	5/52	12.4(-6.9-31.8)	2/17
300-500 GEL	0(--)	7/52	10.1(-0.6-20.7)	4/17
500-1000 GEL	0(--)	7/52	14.9(-14.3-44.1)	1/17
More than 1000 GEL	99.8(--)	10/52	6.2(-12.2-24.7)	1/17
Don't know	0(--)	1/52	9.6(-6.8-25.9)	2/17
No response	0(--)	5/52	4.2(-2.2-10.7)	2/17
Used condom at last AI	68.9(12.6-91.5)	39/54	92.5(70.1-114)	14/17
Consistent condom use during AI in the last 12 months with male client				
often	23.1 *	3/13	--	0/3
sometimes	30.8 *	4/13	--	0/3
never	23.1 *	3/13	33.3 *	1/3
No response	23.1 *	3/13	66.7*	2/3
Condom use at last AI with regular client	100(--)	10/18	66.7*	6/9
Consistent condom use with male regular client in the last 12 months	0(--)	15/35	66.9(25.5-108)	4/9
Female partners				
Ever had female partner	73.2(63.7-81.1)	214/300	73.9(62.4-85.5)	86/115
Had female partner in the last 12 months	55.4(45.3-65.2)	168/300	53(36.9-69)	60/115
Median number of female partners	3.00 *	168	3.00 *	60
Median number of sexual contacts during last month	1.00 *	168	3.00 *	59
Median number of regular partners	1.00 *	93	1.50 *	44
Median number of occasional partners	3.00 *	123	2.00 *	37
Median number of paid partners	2.50 *	24	3.00 *	11
Used condom at last intercourse	71.2(65.5-87.5)	112/168	65.9(47.4-84.4)	42/60
≤ 24	76.7(80.4-96.7)	38/49	93.2	18/20
≥ 25	71.6(64-89.2)	74/119	53.5	24/40
Consistent condom use with regular partners in the last 12 months	25.6(10-57.4)	29/93	28.3(11.8-44.7)	16/44
Consistent condom use with occasional partners in the last 12 months	51(37.7-77.6)	60/123	81.6(67.4-95.8)	24/37
Consistent condom use with paid partners in the last 12 months	45.7(--)	14/24	72.5(46.2-98.7)	10/11
group sex				
Ever engagement in group sex	32.3(24.6-41.1)	133/300	35.6(22.9-48.4)	49/115
Had been involved in group sex in the last 12 months	74(53-84.4)	84/133	67.1(46.7-87.6)	31/49
Were those groups only male groups, only female groups or mixed				

Sexual behavior	Tbilisi		Batumi	
	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
Only male	68.8(31.2-92.6)	61/84	95.1(85.4-105)	24/31
Only female	0(0-0)	4/84	0.6(-1.3-2.5)	1/31
Mixed	31.2(7.5-68.8)	19/84	4.3(-0.4-12.6)	6/31
Used condoms at last group sex (yes)	37.3(7.2-75.7)	47/84	86.2(63.4-109)	23/31
Access to condoms				
Knows where to obtain condoms	98.6(96.7-99.8)	294/300	97(90.9-103)	114/115
Places where condoms can be obtained (most frequently mentioned)- Pharmacy	95.3(91.8-97.6)	267/294	96.6(89.2-104)	111/114
Received condom during the last 12 months	54.2(44.6-65.3)	180/300	57.5(44.3-70.8)	74/115
Lubricants use				
Knows about lubricants	90.6 (82.8-96.3)	283/300	92.1(84-100)	111/115
Knows where to obtain lubricants	68.2 (59.1-79.7)	215/283	72.7(57.9-87.5)	81/111
Lubricant use during AI	61.2 (53.8-72.8)	201/300	61.1(44.6-77.7)	74/115
Consistent lubricant use during AI in the last 12 months	26.2 (16.1-37.7)	68/201	28.2(12.8-43.7)	19/74
Reasons for not using lubricants (most frequently mentioned				
Partners objection	15.6 (9-32.3)	32/215	33.1(21.8-44.3)	30/92
Do not like it	25.1 (17.3-38.4)	64/215	23.3(15.8-30.7)	25/92
Place where lubricants can be obtained (most frequently mentioned)				
Pharmacy	81.2 (72.4-88.7)	166/215	72.5(59.3-85.7)	49/82
Tanadgoma	69.7 (54.3-80.3)	155/215	54.6(40-69.2)	50/82

** Calculated in SPSS*

STIs	Tbilisi		Batumi	
	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
Aware of STIs				
Have heard about the STIs (yes)	88.8 (81.1-94.9)	281/300	99.6(99.1-100)	113/115
Knowledge of symptoms of STI				
At least one	81.5 (74.8-88.9)	226/281	85.6(71.7-99.5)	101/113
No	5.6 (2.1-8.9)	18/281	4.3(-5.5-14.1)	4/113
No response	12.9 (7.2-19)	37/281	10.1(0-20.2)	8/113
Test for STI				
In last 12 months	55.8 (30.3-61.6)	127/199	60.2(45.3-75.1)	49/75
During 1-2 years	12.1(6.5-22)	32/199	19.7(6.4-33)	14/75
2 years ago	26.5 (17.7-53.2)	35/199	19.6(7.9-31.3)	11/75

STIs	Tbilisi		Batumi	
	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
Do not remember	5.6 (0-9.3)	5/199	0.5(-0.4-1.5)	1/75
Never tested	39.4 (30.6-49.2)	101/300	62.4(49.4-75.5)	75/115
Reasons for testing				
Prevention	77.1 (69-89.1)	135/199	68.3(53.9-82.6)	59/75
After appearance of symptoms	22.8 (13.5-37.3)	62/199	29.9(16.7-43.1)	14/75
Partner had STI	1.8 (0.1-5.2)	5/199	2.7(-6-11.3)	2/75
Other requested	--	0/199	1.1(-2.3-4.5)	2/75
Other	5.6 (0.1-7.9)	8/199	0.3(0-0.6)	1/75
Awareness of test results				
Yes	95.8 (82.7-100)	195/199	97.6(89.4-106)	74/75
Reasons for not testing				
No need. I know that I am healthy	60 (33.7-72.6)	68/101	54.3(31.6-76.9)	22/40
Experience of STI last 12 months				
Had symptoms of STI	24.5 (17.4-31.8)	88/300	35.6(22.5-48.7)	29/115
Referral for treatment and preventive actions during STI symptoms manifestation				
Self-treatment	8.3 (0-34.2)	5/88	1.5(-2.8-5.9)	1/29
Traditional healer	0.3 (0-10.9)	1/88	8.8(-8.8-26.3)	2/29
Health facility	73.6 (46.2-98.5)	63/88	27.7(8.8-46.5)	2/29
Private doctor at home	4.2 (0-34.2)	5/88	43.5(-9.6-18.3)	1/29
Pharmacy	2 (--)	4/88	--	0/29
Informed sex partner about STI symptoms	60.5 (46.3-94.6)	53/88	20.5(5.1-35.9)	8/29
No sexual intercourse during symptoms	66.2 (43.9-94.2)	54/88	41.9(14.1-69.7)	12/29
Condom use during symptoms	100 (--)	12/34	0.7(-2.4-3.8)	1/17

Knowledge, opinions and attitudes towards HIV/AIDS	Tbilisi		Batumi	
	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
HIV/AIDS knowledge				
Have heard about the HIV/AIDS	88.9 (81-94.4)	268/300	86.9(76.8-96.9)	110/115
One may protect oneself from HIV/AIDS by having one uninfected and reliable sexual partner (yes)	73 (63.4-82.2)	209/268	94.6(85.7-104)	105/110
One can reduce HIV risk if one properly uses condoms during every AI (yes)	85.2 (76.2-93.3)	233/268	97.4(89.8-105)	108/110
Healthy looking person can have HIV (yes)	86.8 (77.4-93)	240/268	95.6(87.1-104)	106/110
One can get HIV as a result of a mosquito bite (no)	56.4 (44.9-64.8)	142/268	55.1(44.4-65.8)	67/110

Knowledge, opinions and attitudes towards HIV/AIDS	Tbilisi		Batumi	
	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
One can get HIV by sharing meal with someone who is infected (no)	80.1 (68.5-86.1)	207/268	63.1(53.1-73.1)	75/110
One may be infected with HIV by using a needle/syringe already used by someone else (yes)	96.1 (92.1-99.4)	261/268	94(83.4-105)	107/110
Correctly answered 5 questions (GARPR indicator)	30.4(22.4-38.6)	96/300	35.2(23.6-46.9)	55/115
≤ 24	27.8(17.2-39)	32/111	48.1	17/35
≥ 25	33.6(21.9-43.6)	64/189	29.9	38/80
Person with the blood group 0 can get HIV infection (yes)	48.9 (41-60)	142/268	48.2(38.2-58.1)	60/110
A mother can transfer the HIV/AIDS virus to her fetus or baby (yes)	82.1 (73.8-89.3)	217/268	73.3(62.2-84.4)	88/110
Know where to get HIV test				
Yes	79.6(70.2-87.3)	228/268	82.7(71.4-93.9)	97/110
Test for HIV				
In last year	67.9(53.8-86)	125/180	80.6(68.6-92.6)	59/74
In last 1 - 2 years	12.3(6.8-26.4)	27/180	11(0.5-21.6)	8/74
More than 2 years	8.1(0.4-11.3)	25/180	8.4(1.5-15.2)	7/74
Never tested	30.3(22.4-41.1)	87/268	38.5(27.2-49.7)	36/110
Received HIV test last year				
Received HIV test last year and know their results	38.4(28.5-47.4)	125/300	43(29.7-56.5)	59/115
≤ 24	43.2(31.4-57.6)	48/111	59.5	19/35
≥ 25	36.8(22.8-47.8)	112/189	36.2	40/80
HIV risk perception				
High risk	14.7(8.5-22.3)	51/268	13.2(4.6-21.8)	17/110
Medium risk	29(19.6-36.3)	81/268	34(19.8-48.2)	34/110
Low risk	46.6(37.6-58.3)	110/268	34.9(22.1-47.8)	39/110
No risk	0.9(3.1-15.5)	21/268	10.4(4.4-16.4)	13/110
Don’t know	0(--)	2/268	3.8(-0-7.6)	4/110
No response	0.7(0-2.8)	3/268	3.7(-4.8-12.2)	3/110

Violence because of sexual orientation or homosexual relations	Tbilisi		Batumi	
	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
Experienced violence in the last 12 months				
Yes	32(23.2-41.7)	93/300	4.7(-1.3-10.7)	7/115
No	68(58.3-76.8)	207/300	--	0/115
No response	--	0/300	95.3(89.3-101)	108/115
Type of violence				
Physical	43.2(12.3-59.6)	35/93	30.9(-31.3-93.1)	4/7
Verbal	83.5(57.1-100)	88/93	--	0/7
Sexual	3.8(--)	6/93	--	0/7
No response	--	0/93	69(2-136)	3/7
Perpetrator of violence				
Stranger	76.9(73.8-98.3)	71/93	98.1(65-131)	6/7
Family member / Relative	11.6(--)	14/93	--	0/7
Friend	0(0-0)	9/93	--	0/7
Other	4.4(0.3-6.7)	12/93	1.9(-3.7-7.5)	1/7
No response	11.1(0-38.1)	3/93	--	0/7

Interventions / Media	Tbilisi		Batumi	
	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
Source of information of HIV/AIDS and STIs				
Have not heard about the HIV/AIDS and STIs	3.3(1-9.5)	8/300	--	0/115
TV/ Radio	28.4(21.1-36.5)	95/300	43.5(30.5-56.4)	58/115
Newspapers	8(2.9-14.2)	16/300	7.7(2.2-13.2)	12/115
Friends	35.9(27.6-44.6)	102/300	46.5(33.4-59.5)	67/115
Clients	1.3(0-3.9)	2/300	0.6(-0.7-2)	1/115
Family members	2.3(0.6-4.6)	10/300	2.9(-0.5-6.3)	4/115
NGOs (Tanadgoma / Inclusive)	39.5(29.4-49.6)	142/300	45.4(32.9-57.9)	60/115
Internet	38.8(29.6-49.2)	103/300	48.7(36.6-60.8)	62/115
Others	12(7.3-17.4)	44/300	3.4(-0.1-7)	6/115
No response	5.5(2.4-9.4)	22/300	13.2(2.8-23.6)	5/115
Trusted source of information				
TV	16.2(10.2-23)	44/292	20(8.8-31.2)	27/115
Radio	2.3(0.2-5)	6/292	0.1(0-0.2)	1/115
Newspapers	4(1.1-7.6)	13/292	2.8(-0.8-6.5)	6/115
Internet	27.6(19.2-37)	76/292	24.6(12.5-36.6)	31/115

Interventions / Media	Tbilisi		Batumi	
	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
Booklets	31.7(23.8-40.8)	83/292	13.3(5.5-21)	21/115
Friends / relatives	24.1(16.6-32)	64/292	20.1(9-31.2)	27/115
Other MSM	4.7(1.8-8)	22/292	9.9(2-17.8)	11/115
NGO representatives	50.8(41.9-60)	167/292	44.9(32.7-57.1)	58/115
Others	16.9(10.6-24.5)	44/292	1.7(-0.4-3.7)	4/115
No response	0.8(0-2.4)	4/292	13.2(3.1-23.4)	5/115
Preventive program coverage				
Know where to get HIV test and received condoms from preventive programs in last 12 months	43.5(33.2-53.9)	154/300	41.9(29.6-54)	62/115
≤ 24	42(29.1-56.5)	59/111	37.5	18/35
≥ 25	39.8(23.4-50.8)	95/189	43.6	44/80

Biomarker	Tbilisi		Batumi	
	RDS population estimates, % (95% CI)	n/N	RDS-A population estimates, % (95% CI)	n/N
HIV infection				
prevalence	25.1(15.7-34.1)	65/300	22.3(10.4-34.2)	21/115
≤ 24	16.6(5-27.3)	20/111	15.5	6/35
≥ 25	30.8(20.3-46.5)	45/189	25.2	15/80
Syphilis				
prevalence	35(25 -44)	110/300	24.6(11.7-37.5)	28/115
≤ 24	16.4(7.1-26.7)	24/111	6.7	5/35
≥ 25	48.6(35.9-61.4)	86/189	32.1	23.80
Hep C	7.1(2.7-13)	32/300	18.9(7.9-30)	14/115
≤ 24	0.7(0-1.9)	4/111	1.2	2/35
≥ 25	10.8(3.2-18.3)	28/289	26.3	12/80

Annex 2. Survey Instrument

Questionnaire ID Number: ☐

Coupon ID Number ☐

Questionnaire is Coded as: ☐

Questionnaire is Word Processed by: ☐

Behavior Surveillance Study with Biomarker component (BSS)

Men who have Sex with Men

Tbilisi 2012

Organization: Tanadgoma

Interviewer: Please specify the location of the interview and the respondent's ID code.

Operational definition of respondent: Men who have had manual, oral, or anal sex with another man in the past six months.

Introduction: "My name is_____. Georgian organizations Curatio International Foundation and Association Tanadgoma implement a joint project titled "Establishment of evidence based base for HIV/AIDS National Program, by strengthening surveillance system", funded by Global Fund. This survey is aimed at exploring the existing situation. Has anybody taken an interview over the last five weeks for this study?

Interviewer: If somebody has already taken an interview from the person you are talking to over the BSS period, don't take another one. Tell him, that you cannot re-interview him. Thank the person and finish conversation. If nobody has taken an interview from the person in question, continue as follows:

Confidentiality and consent: "I'm going to ask you some very personal questions that some people find difficult to answer. Your answers are completely confidential. Your name will not be written on this form, and will never be used in connection with any of the information you tell me. You do not have to answer any questions that you do not want to answer, and you may end this interview at any time you want to. However, your honest answers to these questions will help us better understand what people think, say and do about certain kinds of behaviors. We would greatly appreciate your help in responding to this survey. The survey will take about 30 minutes to ask the questions. Would you be willing to participate?"

Interviewer's Code:_____

(Interviewer's signature certifying that the respondent has verbally agreed to the interview)

	Respondent 1
Date	
Interviewer	
Result	

Result Codes: Completed – 1; Partially Completed – 2; Previously Interviewed – 3;

Refusal – 4; Other – 5

Q1.Date and time of interview: /_____/date/____/hour/____/minute/

Signature: _____ Date _____

BEHAVIORAL SURVEILLANCE SURVEY (BSS) WITH BIOMARKER COMPONENT FOR MSM

Section A: Background characteristics

REMEMBER THAT ONLY MALES ARE TO BE INTERVIEWED WITH THIS INSTRUMENT.

A1. How old are you?

/_____/_____/ (please specify an exact age)

No response 99

A2. What is the highest level ofeducation you have achieved?

No education	0
Primary (4 grades)	1
Secondary (5-11 grades) (general or vocational school)	2
Incomplete higher	3
Higher	4
No response	99

A3. How long have you lived in Tbilisi?

Number of years /_____/

Record 00 if less than 1 year

Don't know 88

No response 99

A3.aDo you have a permanent dweling?

Yes	1
No, I rent the appartment	2
No, I live with my friend	3
No response	99

A4. Are you an IDP?

Yes	1
No	2
No response	99

A5. What is your nationality?

Georgian	1
Other **(please specify)**_____	2
No response	99

A6. What is your marital status?

Married	1
Divorced/Separated for ever	2
Widower	3
Has never been married	4
Other (please indicate)_____	
No response	99

A7. Are you employed?

Yes, I have permanent job	1
Yes, I have temporary job	2
Student	3
No	4
Other (please indicate)_____	5
No response	99

A8.aIs your monthly income more then 155 GEL?

Yes	1
No	2
No response	99

A8. What is your monthly income?

100 Lari and less	1
100-300 lari	2
300-500 lari	3
500-700 lari	4
700-1000 lari	5
1000 lari and more	6
No response	99

A9. Did you take a part in the study which was carried out by Tanadgoma in 2007 and implied questionnaire filling and blood testing?

Yes (2007)	1
Yes (2010)	2
Yes (2012	3
No	4
Do not remember	88
No response	99

Section B: Drug and Alcohol Use

B1. In the previous month, how frequently did you drink alcohol beverages? (all type of alcohol beverages, include beer) (only one answer)

Every day	1
At least, once a week	2
At least, biweekly	3
Once a month	4
Don't know	88
No response	99
I did not drink (Don't read)	0

B2. Some people have tried various drugs. If you have done this, which one have you tried last 12 months? (Interviewer, read the list. For each drug use relevant option). Ask for the mentioned drugs – Please tell me, how did you take this drug: did you inject, smoke, inhale, drink, breath in or how? (Don't help; multiple answer)

Mult. ans.	Drugs	Inhale/Breath in/Drink/Swallow	Inject	Don't know	No response
0	Has not tasted *(don't read)*				
1	Heroin	1	2	88	99
2	Opium	1	2	88	99
3	Poppy-seed	1	2	88	99
4	Subutex	1	2	88	99
5	Vint/Jef/Amphetamin	1	2	88	99
6	Dezomorphine (Crocodile)	1	2	88	99
7	Inhalants	1	2	88	99
8	Marijuana	1	2	88	99
9	Extasy	1	2	88	99
10	Cocaine	1	2	88	99
11	Sedatives/hypnotics	1	2	88	99
12	Other (Specify) ----------	1	2	88	99
88	Don't know/Don't remember	88			
99	No response	99			

Interviewer: If the respondent has tried injecting drugs, then ask:

B3. Please try to remember, when you injected drugs for the last time, did you use syringe or needle used by someone else?

Yes	1
No	2
Don't remember	88
No response	99

B3.a Please try to remember, if you have ever used syringe or needle used by someone else?

Yes	1
No	2
Don't remember	88
No response	99

B3. Please try to remember, did you have unprotected sex with injecting drug user during last 12 months?

Yes	1
No	2
Don't remember	88
No response	99

Section C: Sexual history: numbers and types of partners

C1. **Do you have homosexual relations? (Explain:** By homosexual relations I mean that you have sexual contact – either oral or anal or both with men.)

Yes	1
No	2 STOP the interview

C2. During the last 12 months have you had homosexual relations??

Yes	1
No	2 STOP the interview

C2.a During the last 12 months have you had sex under the alcohol influence??

Yes	1 (please continue)
No	2 (go to C3a)
Don't remember	88
No response	99

C2.bDo you use a condomwith your partner when you are under the alcohol influence??

Always	1
Often	2
Sometomes	3
Never	4
Don't remember	88
No response	99

Nw I would like to ask you several questions about your sexual partners:

C3a. How many regular male partners have you had during last 12 months?

____ (Explain: regular partner means a spouse or sex partner with whom a relationship is stable)

C3b. How many occasional male partners have you had during last 12 months?

____ (Explain: occasional partner means a sex partner with whom sexual contact is established without exchange for material remuneration, for a short period of time, who is not a spouse, a regular partner, or a sex worker)

C3c. How many commercial male partners have you had during last 12 months?__ (**Explain:** commercial partner means a sex partner with whom sexual contact is established in exchange for material remuneration, meaning that you paid money or gave some other material remuneration to the partner)

(If the respodent aswers yes all type of question 0, STOP the interview)

C4. In the past 12 months, have you had oral sex with a man? (Explain: By oral sexual contact I mean that penis of one person penetrates mouth of another person.)

Yes	1
No	2 **Go to C7**
No response	**99 Go to C7**

C5. The last time you had oral sex, did you or your partner use a condom?

Yes	1
No	2
Don't remember	3
No response	99

C6. In general, with what frequency did you and your partners use a condom with oral sex during the past 12 months?

Always	1
Often	2
Sometimes	3
Never	4

Don't know 88

No response 99

C7**. In the past 12 months, have you had anal sex with a man?**(Explain: By anal sex I mean that penis of one person penetrates anus of another person.)

Yes 1

No 2 Go to section G

No response 99 **Go to section D**

C8. The last time you had anal sex, did you and your partner use a condom?

Yes 1

No 2

Don't remember 88

No response 99

C9. In general, with what frequency did you and your partners use a condom during anal sex during the past 12 months?

Always 1

Often 2

Sometimes 3

Never 4

Don't know 88

No response 99

Now, I would like to ask you questions about your sexual contacts with male partners that you had abroad during the last year.

C10.a Have you had sex with male partner abroad during last year(Interviewer:If no, go to **Section D**)				**C10.b If yes, have you had unprotected sex?**			
Yes	No	Don't know	No response	Yes	No	Don't know	No response
1	2	88	99				
1.1 (Specify countries)_____				1	2	88	99
1.2				1	2	88	99
1.3				1	2	88	99
1.4				1	2	88	99
1.5				1	2	88	99

Section D: Sexual history: Male regular partners

Interviewer: Check question C3a

IF HAD SEX WITH REGULAR PARTNER DURING PAST 12 MONTHS - **Continue**

IF HAD NOT SEX WITH REGULAR PARTNER DURING PAST 12 MONTHS - **Go to Section E**

D1. You had anal sex with your regular ____ male partner, (*Interviewer: specify the number of C3a)* with how many of them did you have anal sexual intercourse last 12 months?

_____ (Specify the number of partners)

Had no anal contact 77 **Go to SectionE**

Don'tknow/Don't remember 88

No response 99

D2. Please remember last month and your regular partner(s), how many times did you have anal contact during this period?

_____ (Specify the number of anal sexual contact)

Don'tknow/Don't remember 88

No response 99

D3. The last time you had anal sex with regular male partner, was a condom used?

Yes 1 **Go to D5**

No 2

Don't know/Don't remember 88 **Go to D5**

No response 99

D4. If no, what was the reason for not using condom? (Do not read the answers)

Did not have 1

Too expensive 2

Partner objected 3

Don't like them 4

Didn't think it was necessary 5

Didn't think of it 6

Other_____7

Don't know 88

No response 99

D5. In general, with what frequency did you and your regular male partner use a condom during the past 12 months?

Always 1

Often	2
Sometimes	3
Never	4
Had no anal contact	5
Don't know	88
No response	99

Section E: Sexual history: Occasional partners

Interviewer: Check question C3b

IF HAD SEX WITH OCCASIONAL PARTNER DURING PAST 12 MONTHS - **Continue**

IF HAD NOT SEX WITH OCCASIONAL PARTNER DURING PAST 12 MONTHS - **Go to Section F**

E1. The last time you had anal sex with occasional _____ male partner, (*Interviewer: specify the number of C3b)* with how many of them did you have anal sexual intercourse last 12 months?

_____ (Specify the number of partners)

Had no anal contact	77 **Go Section F**
Don'tknow/Don't remember	88
No response	99

E2. Please remember last month and your occasional partner(s), how many times did you have anal contact during this period?

_____ (Specify the number of anal sexual contact)

Don'tknow/Don't remember	88
No response	99

E3. The last time you had anal sex with occasional male partner, was a condom used?

Yes	1 Go to E5
No	2
Don't know/Don't remember	88 **Go to E5**
No response	99

E4. If no, what was the reason for not using condom? (Do not read the answers)

Did not have	1
Too expensive	2
Partner objected	3
Don't like them	4
Didn't think it was necessary	5
Didn't think of it	6

Other _____ 7

Don't know 88

No response 99

E5. In general, with what frequency did you and your occasional male partners use a condom during the past 12 months?

Always 1

Often 2

Sometimes 3

Never 4

Had no anal contact 5

Don't know 88

No response 99

Section F: Sexual history: Commercial Sex partners

Interviewer: Check question C3c

IF HAD SEX WITH MALE COMMERCIAL PARTNER DURING PAST 12 MONTHS - **Continue**

IF HAD NOT SEX WITH MALE COMMERCIAL PARTNER DURING PAST 12 MONTHS - **Go to Section H**

F1. The last time you had commercial male _____ partner, (*Interviewer: specify the number of C3c)* with whom sexual contact was established in exchange for material remuneration, meaning that you paid money or gave some other material remuneration to the partner.With how many of them did you have anal sexual intercourse last 12 months?

_____ (Specify the number of partners)

Had no anal contact 77 **Go Section H**

Don'tknow/Don't remember 88

No response 99

F2. Please remember last month and your commercial partner(s), how many times did you have anal contact during this period?

_____ (Specify the number of anal sexual contact)

Don'tknow/Don't remember 88

No response 99

F3. Please remember your last partner, with whom sexual contact was established in exchange for material remuneration did you use a condom?

Yes 1 Go to F5

No 2

Don't know/Don't remember 88 **Go to F5**

No response 99

F4. If no, what was the reason for not using condom? (Do not read the answers)

Did not have	1
Too expensive	2
Partner objected	3
Don't like them	4
Didn’t think it was necessary	5
Didn’t think of it	6
Other _____	7
Don’t know	88
No response	99

F5. In general, with what frequency did you and your commercial male partners use a condom during the past 12 months?

Always	1
Often	2
Sometimes	3
Never	4
Had no anal contact	5
Don’t know	88
No response	99

Section G: Involvement in Commercial Sex

G1. Have you sexwith men in exchange of material remuneration? (Explain: By material remuneration I mean either money or some goods, or paying for your flat, etc.)

Yes	1
No	2 Go to section H
No response	99 **Go to section H**

G2. Over the last 12 months,approximately how often haveyou had sexwith men in exchange of material remuneration?

Everyday	1
Several times a week	2
Once a week	3
2-3 times a month	4
Once a month	5
Once in three months or less	6
Do not know	88
No response	99

G3. Please specify, what kind of material remuneration do you usually get for your service? *(Multiple answer possible)*

Money	1
Food	2
Apartment/living plce	3
Other (Specify) ---------	4
Do not know	88
No response	99

(Interviewer: if the respondent does not take money for his service, go to G6.)

G4. How much money do you get for your services per day?

Less than 10 Lari and less	1
10-20 Lari	2
20-50 Lari	3
50 – 100 Lari	4
More than 100 Lari	5
Other ---------- (**Specify)**	6
Do not know	88
No response	99

G5. What is your monthly income from this service?

Up to 50 Lari	1
50-100 Lari	2
100-200 Lari	3
200-300 Lari	4
300-500 Lari	5
500-1000 Lari	6
1000 and more	7
Other	8
Do not know	88
No response	99

G6. Do you have any other source of income besides this business (commercial sex)?

Yes	1

No 2

Do not know 88

No response 99

G7. Over the last 12 months,about how many clients do you have per one working day?

_____ (*the number)*

Do not know 88

No response 99

G8. Do you consider yourself as involved in the sex-business?

Yes 1

No 2 Go to G10

Do not know 88 **Go to G10**

No response 99 **Go to G10**

G9. What is the reason of your involvement in the sex-business? (*Don't read; help if needed*)

Earning money 1

I like my occupation and

don't want to do anything else 2

I cannot do anything else 3

Other _____(**Specify)** 4

Do not know 88

No response 99

G10. Last time when you had sex with a male partner for material remuneration, did you or your partner use a condom?

Yes 1

No 2

Do not know 88

No response 99

G11. If no, what was the reason for not using condom?

Did not have 1

Too expensive 2

Partner objected 3

Don't like them 4

Didn't think it was necessary 5

Didn't think of it 6

Other_____	7
Don’t know	88
No response	99

G12. In general, with what frequency did you and your male clients use a condom during the anal sex past 12 months?

Always	1
Often	2
Sometimes	3
Never	4
Had no anal contact	5
Don’t know	88
No response	99

G13. How many regular clients do you have? (Explain: regular client means, when repeatedly uses sexual services of a particular person)

_____ (Specify the number of clients)

Have no regular client	77 **Go Section H**
Don’t know	88
No response	99

G14. Was your commercial male partner your regular client?

Was regular client	1 Go to G17
Was not regular client	2
No response	99

G15. Remember your last regular client, when you had anal sex, did you or your partner use condom?

Yes	1 Go to Section H
No	2
Don’t know	88
No response	99

G16. If no, what was the reason for not using condom? (Do not read the answers)

Did not have	1
Too expensive	2
Partner objected	3
Don't like them	4
Didn’t think it was necessary	5

Didn't think of it	6
Other _____	7
Don't know	88
No response	99

G17. In general, with what frequency did you and your regular client(s) use a condom during the anal sexual intercourse past 12 months?

Always	1
Often	2
Sometimes	3
Never	4
Had no anal contact	5
Don't know	88
No response	99

Section H: Sexual history: Sex with females

H1. Have you ever had sexual intercourse with a woman?

Yes	1
No	2 Go to section I
No response	99 **Go to section I**

H2. Have you had sexual intercourse with woman during the past 12 months?

Yes	1
No	2 Go to section I
No response	99 **Go to section I**

H3. Remember last month and your woman partner(s), how many times did you have sexual intercourse with women partners during this period?

H4. NowI would like to ask you several questions about your sexual partners that you had during the last 12 month.

H3a. How many regular female partners have you had during last 12 month?___ (Explain: regular partner means a spouse or sex partner, with whom the relationship is stable).

H3b. How many occasional female partners have you had during last 12 month?___ (Explain: occasional partner is a sex partner, for a short period of time, who is not a spouse, a regular partner, or a sex

worker).

H3c. How many commercial female partners have you had during last 12 month?___ (Explain: commercial partner is a sex partner with whom sexual contact is established in exchange for material remuneration, meaning that you paid money or gave some other material remuneration to the partner).

(If the respondent answers yes all type of question 0, Go to Section I)

H5. The last time you had sex with female sex partner. Was a condom used?

Yes	1
No	2
Don't remember	88
No response	99

H6. *Interviewer:* Check question H3a

IF HAD SEX WITH REGULAR FEMALE PARTNER DURING PAST 12 MONTHS - **Continue**

IF HAD NOT SEX WITH REGULAR FEMALE PARTNER DURING PAST 12 MONTHS - **Go to H7**

In general, what frequency did you use a condom with your regular female partner during last 12 months?

Always	1
Often	2
Sometimes	3
Never	4
Don't know	88
No response	99

H7. *Interviewer*: Check question H3b

IF HAD SEX WITH OCCASIONAL FEMALE PARTNER DURING PAST 12 MONTHS - **Continue**

IF HAD NOT SEX WITH OCCASIONAL FEMALE PARTNER DURING PAST 12 MONTHS - **Go to H8**

In general, what frequency did you use a condom with your occasional female partners during last 12 months?

Every time	1
Most times	2
Occasionally	3
Never	4
Don't know	88

H8. *Interviewer*: Check question H3c

IF HAD SEX WITH COMMERCIAL FEMALE PARTNER DURING PAST 12 MONTHS - **Continue**

IF HAD NOT SEX WITH COMMERCIAL FEMALE PARTNER DURING PAST 12 MONTHS – **Go to I**

In general, what frequency did you use a condom with your commercial female partner during last 12 months?

Always 1

Often 2

Sometimes 3

Never 4

Don't know 88

No response 99

Now, I would like to ask you questions about your sexual contacts with female partners that you had abroad during the last year.

C10.a Have you had sex with female partner abroad during last year(Interviewer:If no, go to **Section D**)				**C10.b If yes, have you had unprotected sex?**			
Yes	No	Don't know	No response	Yes	No	Don't know	No response
1	2	88	99				
1.1 (Specify countries)_____				1	2	88	99
1.2				1	2	88	99
1.3				1	2	88	99
1.4				1	2	88	99
1.5				1	2	88	99

Section I: Group sexual practices

I1. Have you ever had group sex?

Yes 1

No 2 Go to section J

Don't know 88 Go to section J

No response 99 **Go to section J**

I2. Did you have group sex during the last 12 months?

Yes 1

No 2 Go to section J

Don't know 88 Go to section J

No response 99 **Go to section J**

I3. Were those groups only male groups, only female groups ormixed (male and female) groups?

Only males 1

Only females 2

Mixed 3

Don't know 88

No response 99

I4. At the last time you took part in the group sex, did you use acondom?

Yes 1

No 2

Don't know 88

No response 99

Section J: Condoms, lubricants

J1. Do you know of any place or person from which you can obtain condoms?

Yes 1

No 2 Go to J3

No response 99

J2. Which place or person do you know where you can obtain condoms?

(Don't read, circle each mentioned answer.)

Shop 1

Pharmacy 2

Market 3

Clinic 4

Bar/guest house/hotel 5

Peer educator 6

Friend 7

"Tanadgoma" 8

Other_____ 9

Don't know 88

No response 99

J3. During the last 12 months, have you been given condoms by social workers, health cabinets?

Yes 1

No 2

Don't know 88

No response 99

J4. Now I would like to ask you some questions about the use of lubricants during sexual intercourse with men. (*Explain: I mean some dope grease that is used during sexual intercourse to make it less painful*.)

Do you use lubricants during anal intercourse with men?

NO ANAL SEX WITH MEN	1 **Go to section K**
Yes	2
No	3 Go to J6
Don't know what it is	4 **Go to section K**
No response	99

J4.1 Which lubricants do you use*(Several answers are possible):*

lubricants based on a liquid	1
lubricants with silicon	2
vazelin	3
cosmetis fat cream	4
intim-gel	5
skin oil	6
hair gel	7
animal fat	8
Other_____	9
Don't know	88
No response	99

J5. How often do you use lubricants?

Always	1
Often	2
Sometimes	3
Never	4
Don't know	88
No response	99

J6.Why do not you use a lubricant? (Don't read, circle each mentioned answer.)

Partner objects	1
Afraid to use it	2
Too expensive	3
Can't get it	4
Don't like lubricants	5
Other_____	6
Don't know	88
No response	99

J7. Do you know any place or person where you can obtain lubricants?

Yes	1
No	2 Go to section K
No response	99

J8. Which place or person do you know where you can obtain lubricants? *(Don't read, circle each mentioned answer.)*

Shop	1
Pharmacy	2
Market	3
Clinic	4
Bar/guest house/hotel	5
Peer educator	6
"Tanadgoma"	7
Friend	8
Other_____9	
Don't know	88
No response	99

Section W: Other practice of sexual experience

Did you use any of the following items during sex?	Yes	No	No response
Sex toys (Dildo, Faloimitator)	1	2	99
Fingering	1	2	99
Fisting	1	2	99

Section K: Sexually Transmitted Infections

K1. Have you ever heard of diseases that can be transmitted through sexual intercourse (venereal diseases)?

Yes	1
No	2 **Go toK3**
No response	99 **Go toK3**

K2. Can you describe any symptoms of STIs in men? What external signs or symptoms may cause men to suspect they may be infected? - Any other signs?

(Don't read, Circle all mentioned responses. More than one answer is possible)

Genital discharge	1
Burning pain on urination	2
Genital/anus ulcers/sores	3
Swelling in groin area	4
Other _____	5
No response	99

K3. Have you had anal or genital discharge during the past 12 months?

Yes	1
No	2
Don't know	88
No response	99

K4. Have you ever been tested for STIs?

Yes	1
No	2 **Go toK8**
No response	3 **Go to section L**

K5. If yes, when was the last time you were tested on STIs?

During the last year	1
During 1-2 year	2
2 years ago	3
Do not know	88
No response	99

K6. Why did you decide to be tested? *(Multiple answer possible)*

For prophylaxis	1
After discovering symptoms	2
Sexual partner had an STI	3
I was asked to	4
Other (Specify)_____	5
No response	99

K7. There is no need to disclose your test results to us, but have you enquired about them yourselves?

Yes	1 Go to section L
No	2 Go to section L
No response	99 Go to section L

K8. If you have not been tested, what was the reason for that? *(Multiple answer possible)*

Don't know where to get tested	1
Don't need it, I know I am healthy	2
Have never thought about this	3
Afraid of the result, I prefer not to know	4
It is very expensive	5
Feel shy before the personnel	6
Don't want to meet some acquaintances when I go for testing	7
Don't want someone to know my test results (even medical personnel)	8
Don't trust doctors	9
Other (Specify) _____	
No response	99

Note: Module L should be filled only for those respondents, who have suffered STI symptoms over the last 12 months. (Check question K3). Otherwise go to Section M.

Section L: STI Treatment seeking behaviors

L. What did you do when you had genital or anal release or ulcer/boil last time? *(Circle one answer for each question)*

Questions	Yes	No	NR
1. Applied self-treatment	1	2	99
2. Consulted or received a treatment from a traditional healer or a wise man	1	2	99
3. Consulted or received a treatment at the state-owned health clinic or hospital	1	2	99
4. Consulted or received a treatment at a private health clinic or hospital	1	2	99
5. Consulted or received a treatment at a drugstore	1	2	99
6. Told your sexual partner about your symptoms or STI	1	2	99
7. Stopped having sex when the symptoms appeared **(*If answer is Yes Go to Section M)***	1	2	99
8. Did you use the condoms during the symptom period?	1	2	99

Section M: Knowledge, opinions, and attitudes towards HIV/AIDS

M1. Have you ever heard of HIV or the disease called AIDS? (*Explain:* HIV is a human immunodeficiency virus which causes AIDS. *Make sure that the respondent understood what HIV is. You may use additional definitions too*.)

Yes 1

No 2 Go to section N

No response 99

M2. There is no need to disclose their names, but do you know anyone who is infected or died of AIDS?

Yes 1

No 2

No response 99

M3. Please give me your opinion regarding the following:

(Please read out all options and circle the relevant answer.)

Assertions	Yes	No	DK	NR
1. One may protect oneself from HIV/AIDS by having one uninfected and reliable sexual partner	1	2	88	99
2. One can reduce HIV risk if one properly uses condoms during every sexual contact	1	2	88	99
3. Do you think that healthy looking person can be infected with HIV	1	2	88	99

4. One can get HIV as a result of a mosquito bite	1	2	88	99
5. Do you believe that one can get HIV/AIDS by taking food or drink infected person	1	2	88	99
6. Do you believe that one may be infected with HIV/AIDS by using a needle/syringe already used by someone else	1	2	88	99
7. Do you believe that one may be infected with HIV/AIDs if has blood group A?	1	2	88	99
8. Do you believe that an HIV/AIDS-infected woman can transfer virus to her fetus or child?	1	2	88	99

M4. Is it possible in your community for someone to get a confidential HIV/AIDS test ? By confidential, no one else has access to your HIV test results

Yes 1

No 2

Don't know 88

No response 99

M5. Do you know the place where you can get HIV tested?

Yes 1

No 2

No response 99

M6. There is no need to disclose your test results to us, but have you ever been tested for HIV?

Yes 1

No 2 Go to M10

No response 99 **Go to M10**

M7. When was the last time you were tested for HIV?

During the last year 1

1-2 years ago 2

2 years ago 3

Don't know 88

No response 99

M8. Were you tested voluntary for HIV or were you required?

Voluntary 1

Required 2

No response 99

M9. There is no need to disclose your test results to us, but have you enquired about them yourselves?

Yes	1
No	2
No response	99

M10. How you evaluate your risk for HIV?

High risk	1
Medium risk	2
Low risk	3
No risk	4
Don't know	88
No response	99

Section N: Violence

N1. During the last year Have you became a victim of violence because of your sexual orientation or sexual relations

Yes	1
No	2 Go to section O
Don't know	88 Go to section O
No response	99 Go to section O

N2. What kind of violence have you experienced? (Multiple answer possible)

Physical (beating, cutting, etc)	1
Verbal (verbal insult)	2
Sexual (rape)	3
No response	99

N3. Who was the Perpetrator of violence?

Stranger	1
Family member	2
Friend	3
Other **(specify)**_____	4
No response	99

Section O: Exposure to Interventions

O1. Could you list all sources of information on STI/HIV? (Don't read) Could you remember some other sources of information? (Multiple answer)

TV/Radio	1
Newspapers	2
Friends	3
Clients	4
Family members	5
"Tanadgoma"/ "Incluzive"	6
Internet	7
Other_____	8
No response	99
I have never heard anything about STI/HIV	00

O2. What is the most reliable source for you? *(Multiple answer)*

TV	1
Radio	2
Newspapers	3
Internet	4
Special Boolkets	5
Friends, relatives	6
Other homo/Bisexual males	7
NGO	8
Other Please **specify**_____	9
No response	99

Interviwer: before question Q3, ask questions from the additional forms 1 and 2.

Q3. That is the end of our questionnaire. You have been very helpful. After generalization and statistical analysis of the present study our organization will plan projects that will be beneficial for all. If in several months I need to take another interview from you, would you make yourself available?

Yes	1
No	2
Don't know (we'll see)	88

Interviewer, thank the respondent for cooperation and say good-bye. After the interview make sure you have taken down the respondent's identification data so that the same person is used in the following panels of the study.

Q4. During the interview the respondent was:

Interested	1
Calm	2
Indifferent	3
Agitated	4
Uninterested	5

Time when interview was concluded_____

The questionnaire is kept till completion of the project.

Quality control on the interview was carried out by_____

Position_____

Organization_____

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