HEALTH RESEARCH UNION

Integrated Bio-Behavioral Surveillance Survey among People Who Inject Drugs

Risk Behaviors and HIV Prevalence Trends in Target Groups with High Risk of HIV infection - People Who Inject Drugs, Bio-Behavioral Surveillance Survey

Study report
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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
Anti-HCV	Hepatitis C virus (HCV) antibodies
ART	Antiretroviral therapy
CI	Cumulative incidence
GHRN	Georgian Harm Reduction Network
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HCV PCR	HCV RNA Real-time polymerase chain reaction test
HIV	Human Immunodeficiency Virus
NSP	Needle and syringe programme
OR	Odds Ratio
OST	Opioid substitution therapy
p	*p* value
PWID	People Who Inject Drugs
RDS	Respondent-driven sampling
RNA	Ribonucleic acid
RODS	Rapid Opioid Dependence Screen
RR	Relative Risk
STI	Sexually Transmitted Infection
UNAIDS	UNAIDS Joint United Nations Programme on HIV/AIDS
WHO	World Health Organization
$\chi 2$	A chi-square test
95% CI	95% confidence interval

Executive Summary

Introduction

The HIV prevalence in Georgia is currently low, but widespread injecting drug use and intensive migration with neighboring countries may cause incidence to increase. A high concentration of infection among key affected populations (KAPs), including people who inject drugs (PWID), represents one of the main public health concerns in Georgia and poses the largest obstacle to ending the AIDS epidemic by 2030.

Bio-behavioral surveys should be conducted periodically to estimate HIV prevalence among KAPs, determine behavioral factors that might contribute to transmission, and assess the effectiveness of interventions/programs aimed to prevent HIV infection in these populations.

This report describes the 2022 Integrated Bio-Behavioral Surveillance Survey (IBBSS) among PWID in seven cities Georgia. The study objectives were:

- Estimate HIV, hepatitis B virus (HBV), and hepatitis C virus (HCV) prevalence among PWID
- Determine HIV-related risk behaviors among PWID
- Evaluate the trend of illegal drug use among PWID
- Evaluate the knowledge, attitudes, and self-assessment of risk related to HIV and HCV infections among PWID
- Evaluate the effectiveness of preventive programs among PWID

Methods

A cross-sectional study design was used for the survey. The study was conducted in seven major cities of Georgia: Tbilisi, Gori, Rustavi, Telavi, Batumi, Zugdidi, and Kutaisi. Study participants were sampled using respondent-driven sampling (RDS), a method widely used for reaching key populations. Study inclusion criteria were age ≥ 18 years, drug injection practice during last 30 days prior to the survey, residence in the selected city, ability to complete the interview, and ability to give informed consent for study participation.

Face-to-face interviews were conducted using a specially designed structured questionnaire to collect information about the study participants' socio-demographic characteristics, history of drug use, risky behavior related to drug use, sexual history, risky sexual behavior, knowledge, attitudes and risk perceptions on HIV and HCV, history and attitude about HBV vaccine, use of preventive programs, and social factors related to drug use. Blood samples were drawn from each study participant to estimate HIV, HBV, and HCV prevalence among PWID in Georgia.

Collected data were entered and analyzed using statistical software SPSS v22. Univariate, bivariate, and multivariate analyses were conducted.

Results

Drug use history

- The median age of first drug consumption is 17 years. Many participants (40.9%) reported the first injection at the ages of 15-19. Only 2.7% of participants reported the injecting experience before the age of 15, while 56,4% reported first injection at age 20 or older. Respondents from Tbilisi (16.1%), Kutaisi (14.8%), and Zugdidi (13.1%) have the highest rates of drug use before the age of 15.
- More than two-thirds of surveyed PWID (70.8%) report being dependent on drugs. Out of those respondents who perceive that they have drug addiction or report less than 5 years of drug dependence (41%), 53.4% have received a syringe/needle or other type of injection kit, 46.1% received a condom, and 41.1% received brochures/pamphlets/booklets on HIV/AIDS free of charge.
- Among the entire sample, 26% report daily injections during the last month, the daily injection is mostly mentioned by respondents from Batumi.
- Three-fourths of the sample report the practice of drug injection in groups during the last 6 months, typically with 3 people. Only one-fourth of respondents reports a solo drug injection practice.
- The cities where group injection practices are more common (less solo injection) are Rustavi (74.1%) and Zugdidi (56.4%).
- Heroin, Buprenorphine, and Methadone make up the top 3 substances injected during the last month.
- There is a statistically significant difference between cities in types of drugs injected during the last 12 months. The use of CNS depressants was more commonly reported in Zugdidi. In Kutaisi, unlike other cities, the use of opioids is significantly lower, while the use of stimulants and new psychoactive substances (NPS) are high. During the prior month, cities with high odds of opioid use include Rustavi, Tbilisi, Batumi, and Zugdidi. Compared to Tbilisi, the odds of injection of stimulants are significantly higher in Rustavi, Telavi, Zugdidi and Kutaisi, the injection of NPS is significantly higher only in Kutaisi. The odds of injection of stimulants and NPS is more common in older participants (>35 years) compared to adults younger than 35 years.
- Non-injectables: Out of those who reported non-injection drug use during the last month 55.5% used hemp products (Marijuana, Hashish, Anasha), followed by Methadone (18.5%), Diazepam (18%), Clonazepam (14.5%), Baclofen (10.8%), Gabapentin (10.2%), Buprenorphine (8.7%) and Pregabalin (6.5%). Out of non-

injection NPS, 4.5% use synthetic cannabinoids (Bio, spices, chocolate). The use of synthetic stimulants (Crystal, bath salts, Mephedrone, bio-MDMA) was reported by 2% of respondents, and synthetic hallucinogens (Bio-LSD/NBOME) by 1.4%.

- More than half of the whole sample reported withdrawal symptoms after rapid tapering or sudden discontinuation of drug use during the last year. Also, almost one-fourth of respondents reported active dependence on opioids.

Drug use-related risky behavior

- Risky behaviour related to drug use is more commonly seen in younger PWID (≤35 years old). Higher portion of PWID aged ≤35 used needles/syringes/butterfly needles that had already been used by themselves or someone else, shared various objects (bottles, spoons, boiling pans and etc), and less frequently used sterile needles.
- Fewer PWID aged ≤35 years old use needle and syringe programs (NSP).
- Alcohol consumption increases the risk behaviours associated with drug injection. Alcohol-consuming PWID more often use needles already used by themselves or someone else and less frequently clean previously used needles/syringes/butterfly needles.
- Participation in NSPs decreases the risk behaviors associated with drug use. During the last month and the last drug injection, PWID in NSPs were less likely to inject with used needled/syringes/butterfly needles. Also, fewer PWID in NSPs share injecting paraphernalia (flask, spoon, bottle and etc).
- 10% of PWID had overdosed and 25.5% had witnessed someone else overdose in the past year, out of which Naloxone was used in 63% of cases, and in 19% ambulance was called. In 16 cases ambulance notified the police regarding overdose.
- The lowest number of overdoses and witnesses of overdose was seen in Gori.
- Higher frequency of overdose was observed among the younger (≤35 y/o) PWID.
- There was no statistically significant difference in overdose rates between beneficiaries and non-beneficiaries of NSP.
- A higher proportion of PWID in substitution therapy reported taking drugs with used injecting devices compared to those in a NSP (used by someone else 33.7% vs 26.4%; used previously by themselves 52.8% vs 39.6%).
- Older PWID were more likely to inject drugs at home compared to ≤35 years old, who preferred to use drugs in the car or at other places or "whenever possible."
- 47% of participants reported discarding used recapped needles in the garbage, 34% bended/broke the used needle before discarding, small proportion discarded uncapped needle or burned into the oven.

Sexual behavior

- The majority of respondents (75.7%) had their first sexual intercourse before the age of 18.
- More than 10% of the study subjects had sex with one or more paid sexual partners during the last 12 months.
- Only 31.4% used a condom during the last sexual intercourse.
- 1.3% ever had a same-sex partner, and only 36% of them used a condom during the last homosexual contact.
- 6.5% had anal sex with any sexual partner in the last 12 months and only 46.6% of them used a condom during the last anal intercourse.
- More than half (58.3%) of the PWID only themselves, 0.9% only their sexual partner and 2.9% both (themselves and their sexual partner) were under the influence of drugs during the last sexual contact.
- 71.9% used condom during the last sexual contact with casual sexual partner.
- In the last 1 year, 8.8% of respondents never used condom and only 46.4% always used condom with casual sexual partner.
- 88.7% used condom during the last intercourse with paid sexual partner.
- Only 58.8% of PWID always used condoms with paid sexual partner during the last year.
- A higher proportion of respondents who had used preventive programs in the last 1 year used condom during their last sexual intercourse than those who did not receive the service (43.4% vs 31.6%, respectively).
- A larger proportion of respondents used condom during the last sex with casual sexual partner who had used preventive programs in the last 1 year compared to those who had not used these programs (81.8% vs 72.7%, respectively).
- Use of preventive programs was not associated with the likelihood of using a condom during last sexual contact with a paid sex partner.
- Risky sexual behaviors were more common among young PWID (≤35 years old) compared to older ones (>35 years), namely:
  - Probability of using condom during the last sexual contact was relatively low among young PWID
  - The practice of anal sex was three times higher among PWID aged ≤35 years compared to those in >35 age group (12.9% vs 4.8%, respectively).
  - Twice as many young age (≤35 years) PWID reported having casual sexual partner in the last year compared to those over 35 years old.
  - Probability of paid sexual intercourse was higher among young PWID (25.2%), compared to those over 35 years old (8.7%).

- Alcohol consumption was associated with risky sexual behavior. In particular, PWID who consumed alcohol once or more times a week in the past 1 month were less likely to use condoms during casual sexual contact than those who never or rarely consumed alcohol (66.1% vs 79.8%, respectively).

HIV, HBV and HCV infection (prevalence, treatment history, vaccination)

- 0.9% of study participant PWID were HIV positive. The highest proportion of PWID with positive HIV test result was in Zugdidi (2.5%).
- Hepatitis C antibody prevalence was 58.1%. The highest anti-HCV prevalence was in Zugdidi (76.0%) and the lowest in Kutaisi (46%).
- Among anti-HCV (+) PWID chronic HCV was documented among 32.1%.
- 13% of PWID who were treated and achieved sustained viral response (SVR) were reinfected.
- 2.5% were chronically infected with HBV (positive HBsAg).
- The HBV vaccination rate and willingness to be vaccinated is extremely low among this high-risk group.
  - Only 7.5% were reported to be vaccinated against HBV.
  - Only 10.6% of PWID being treated for HCV infection through the HCV elimination program were vaccinated against HBV (note: HCV program covers free HBV vaccination among treated individuals).
  - Only 27.8% of non-vaccinated individuals were willing to get HBV vaccine.
- 19.4% of respondents who reported being treated for HCV infection were not actually treated (they were not registered in HCV treatment database).
- History and frequency of incarceration is associated with HCV treatment history – the proportion of HCV-treated patients is twice as high among previously incarcerated PWID; HCV treatment rate is higher among respondents with more than one period of incarceration vs those who had been in prison only once.

Knowledge about HIV infection and testing history

- Important proportion of participants believe transmission of HIV is possible by a mosquito bite (16.5%).
- Nearly all (92.8%) think it is possible to get infected by using a needle already used by someone else, while 84.9% believe it can happen by using shared injection paraphernalia (utensil, spoon, cotton/filter or water previously touched by someone else).
- The HIV information sources were friends/acquaintances/relatives/colleagues among 53%, followed by NGO representatives/social workers in 46.6%, TV in

43.3%, internet in 27.9%, healthcare workers in 16.3% and printed educational materials (booklets, flyers and others) in 14.1%.

- Most participants (87.6%) reported that they would notify their spouse/regular sexual partner and injection partners in a case of positive HIV test result.
- 85.8% ever had an HIV test but only 44.6% had one in the last year.
- 3.3% of PWID would not take an HIV test because they are afraid that the police will find out.

Access and coverage of treatment and harm reduction interventions

- Minimal coverage [1] of prevention program was reported by 29.5% and full coverage - by 30.4% of PWID.
- 62.9% of PWID had not received any HIV educational information in the past year and 59.9% had never received information brochures/pamphlets/booklets on HIV/AIDS.
- Needle partners and spouses/friends were named as persons who could exert some influence on the respondent's decision to stop drug use.
- 62.3% of PWID had never received any treatment or specific assistance related to drug use.
- Most (83.2%) of respondents that are currently treated (or have been treated in the last 12 months) are on substitution therapy with Methadone/Suboxone. Tbilisi was the city with the highest (32.6%) proportion of beneficiaries in treatment programs.
- 44.3% do not want to be enrolled in the treatment, while for 10.8% lack of treatment was due to insufficient funds or the high price of treatment.
- The use of services available in prevention programs during the last year differs between the cities. The city with the highest proportion (79.2%) of PWID receiving clean injection materials was Gori while the highest proportion receiving condoms was in Telavi and Batumi.
- Telavi had the highest use of qualified educational information and the informational material (66% vs 67.9%, respectively) (Graph I3).
- The range of prevention program coverage was different between cities. Namely, Telavi leads with coverage of preventive programs with full and maximum coverage rate (72.6% and 57.0%, respectively), while Gori leads with minimum coverage rate (71.1%). The rate of minimum coverage with preventive programs is lowest in Rustavi (1.5%).

[1] Minimal Coverage with prevention programs: aware about HIV testing possibilities and received at least one of the following program commodities: sterile injecting equipment or condom or brochures/ pamphlets/ booklet or qualified educational information last 12 months

- Knowledge of needle and syringe programs was higher among those >35 years.
- The coverage of preventive programs is higher in employed PWID.

Conclusions and recommendations

- PWID are well informed about HIV, however, important proportion of them still have incorrect information on the modes of HIV transmission (for example, some of them still believe that it can be transmitted through a mosquito bite, through food, etc.). Therefore, educational activities aiming to increase knowledge about HIV should be reinforced.
- More than half of PWID reported never receiving HIV information materials.
- Beneficiaries of harm reduction services were four times more likely to receive HIV information materials compared to non-beneficiaries.
- Risky behavior associated with injection drug use is more common among PWID younger than 35 years (for example, sharing injection paraphernalia). This age group is less likely to use NSP and the rate of overdose is also higher among younger PWID. Therefore, this age group should be major target while planning educational activities.
- Alcohol use among PWID increases the chance of risky behavior. Alcohol abusers are more likely to inject used injection devices and less likely to clean used needles/syringes. Therefore, it is recommended to include information on impact of alcohol in the educational activities. This will prevent direct health consequences of alcohol use (especially considering the high prevalence of hepatitis among PWID) as well as prevention of alcohol related high-risk injection practices.
- The use of NSP reduces injecting risk behaviors. The beneficiaries of this program are less likely to inject with used devices.
- Unfortunately, the frequency of risk behavior in PWID has increased since 2017. More people inject with used devices. The lockdown during the COVID pandemic might be one of the reasons for increased risk behavior. Meanwhile, the number of sterile injection devices received from the NSP is increasing, which contradicts with the increased use of used injection devices.
- The majority (85%) of PWID buy sterile needles/syringes in the pharmacy, 57% received from NSP, and the others – from friends. During the personal communications with PWID as well as NSP service providers the low quality of injection devices is often emphasized. Accordingly, PWID prefer to buy needles/syringes at the pharmacy. It is recommended to plan and conduct the research on satisfaction of NSP beneficiaries with disposable materials and association of satisfaction with the risky behavior.
- The information on discarding the used injecting devices in the garbage is alarming in terms of infection control of blood borne viruses. Discarded needles (particularly uncapped and broken or bended) creates the risk of infection

transmission for janitors as well as any citizen, because the garbage is often scattered in the streets. There are cases of clinic admissions because of injuries by needles from the garbage, including among the children. There is a need to increase the awareness among PWID about the risk related with discarding used injection materials and about the methods of handling.

- The majority of PWID (77.2%) know where to apply to receive sterile needles/syringes. However, increasing this proportion is important to improve the coverage of preventive programs among PWID. Expansion of peer driven interventions is recommended to improve enrollment of more PWID preventive programs.
- Both the full, as well as minimal coverage by preventive programs across cities is different. Understanding the factors associated with these differences and continuous exchange of experience between HR sites is very important.
- A significant proportion of PWID do not use condoms. Beneficiaries of preventive programs are more likely to use condoms, although this indicator is still not sufficient. Accordingly, raising awareness about safe sex practices among the beneficiaries of preventive programs is one of the most important tasks.
- Sexual behavior is riskier among young PWID (including casual sexual contacts, lower rate of condom use, etc.), which indicates a special need for sex education in these age groups.
- Over the past five years, the proportion of PWID who always use condoms has not increased substantially, and the percentage of those who never use condoms has not decreased. Therefore, the need to review and strengthen educational activities is obvious.
- Despite the fact that Georgia is implementing state HCV elimination program since 2015 aiming to decrease HCV prevalence in Georgian population, 18.6% of study sample and 32.1% of HCV antibody (+) individuals were HCV RNA positive, which is inconsistent with country's goal to achieve hepatitis C elimination.
- This rate shows that 18.6% of PWID in Georgia need antiviral treatment. Different activities like strengthening the decentralization process (delayed due to COVID-19 pandemic and different bureaucratic barriers) should be planned to increase enrollment of PWID into the treatment program. Currently, HCV treatment is integrated in only 4 harm reduction centers. Expanding treatment integration into harm reduction and opioid substitution therapy centers will increase treatment coverage.
- HCV reinfection rate is another alarming finding. 13% of PWID having achieved sustained viral response (SVR) are still HCV RNA positive. It is obvious that

improvement of preventive measures against HCV transmission is urgent to avoid new cases of reinfection.

- The proportion of PWID who reported being treated for HCV infection is much higher compared to percentage of actually treated individuals, supposedly indicating that many people think HCV can be cured by hepatoprotectors, which was widely used in Georgia during previous decades. Some of these respondents might have been treated with interferon before elimination program, but their proportion is expected to be very low, as very few people could afford interferon therapy because of high price. This finding should be highlighted during HCV educational campaigns to increase the knowledge on HCV antiviral treatment.
- Hepatitis B vaccination coverage is alarmingly low, including among patients treated for hepatitis C. Considering the fact that patients on HCV treatment should be vaccinated against hepatitis B through the HCV elimination program, vaccination rate was expected to be higher. Therefore, elimination program providers should be notified about this finding and retrained to improve hepatitis B vaccination rates, particularly in high-risk individuals such as PWID. In addition, it is important to implement hepatitis B vaccination among HCV negative PWID, in particular harm reduction and OST centers.
- Only 27% of non-vaccinated PWID are willing to be vaccinated. This rate indicates that the educational activities for PWID in this direction are not sufficient. It is urgent to create educational program on HBV vaccination for providers of services for PWID as well as beneficiaries.

Introduction

HIV/AIDS continues to be a major global health problem. It was estimated that 38.4 million people were living with HIV infection by 2021 in the world, of which 1.5 million were infected and 650,000 died only in 2021 [1,2]. One of the modes of HIV transmission is injection drug use, which 35 times increases the risk of infection. Globally, 10% of new HIV cases are among people who inject drugs (PWID) [3].

In December 2020, the Joint United Nations Program on HIV/AIDS (UNAIDS) released new ambitious goals "95-95-95 targets", according to which 95% of all people living with HIV should know their HIV status, 95% of all people diagnosed with HIV infection should receive antiretroviral therapy, and 95% of all people on antiretroviral treatment should have viral suppression by 2025 [4].

The COVID-19 pandemic has disrupted HIV treatment and prevention services, leading to an increase in new cases of HIV infection in many countries. Every day, 4,000 people, including 1,100 young people (aged 15 to 24), become infected with HIV. If the current trend continues, there will be 1.2 million new cases in 2025, which is three times higher compared to the UNAIDS target number (370,000 new cases) [3].

New HIV infections and AIDS-related deaths continue to rise in Eastern Europe and Central Asia. It is estimated that the annual number of new cases of HIV infection increased by 43% and AIDS-related deaths increased by 32% between 2010 and 2020. In the region, HIV infection is concentrated in key populations and their sexual partners. In adult population, 43% of new cases of HIV infection occur in people who inject drugs [5].

Over the past three decades, more than 2.2 million new cases of HIV infection have been reported in the European region. In 2020 alone, 104,765 people were diagnosed with HIV infection. Most of the new cases of HIV infection (81%) are registered in Eastern Europe, 15% in Western Europe and 4% in Central Europe [6].

Georgia is low HIV prevalence country (estimated HIV prevalence in adult population is 0.4%), however, there is a high risk of spreading HIV/AIDS epidemic due to high number of PWID and intensive migration to neighboring countries [7]. According to the data of Infectious Diseases AIDS and Clinical Immunology Research Center, as of October 31, 2022, 9,651 cases of HIV infection have been registered in Georgia, of which approximately 75% are men. Almost half of those infected (49.1%) developed AIDS, and 20.9% died. In 2022, the number of new HIV cases decreased about three times compared to the previous year. People who inject drugs account for 34.4% of HIV infection cases [8]. According to the HIV testing and treatment cascade data in Georgia, 88% of people living with HIV know their HIV status, 71% of people diagnosed with HIV infection are

on antiretroviral therapy, and 68% of people on antiretroviral treatment have achieved viral suppression [9].

Despite the low prevalence of HIV infection in general population, high concentration of HIV in key populations, including PWID, represents an important public health problem in Georgia and one of the main challenges to achieve the ending of HIV/AIDS epidemic by 2030. Bio-behavioral surveys should be conducted periodically among key populations to estimate HIV prevalence, determine behavioral factors contributing to HIV transmission, and assess the effectiveness of interventions/programs aimed to prevent HIV infection in these populations.

In Georgia, integrated bio-behavioral surveys (IBSS) among PWID have been carried out since 2002. The last survey was conducted in 2017 in 7 cities of Georgia, where 2050 people participated. According to the IBSS 2017 results, the prevalence of HIV infection was 2.3% and the prevalence of hepatitis C was 63.2% among PWID [10].

HIV, hepatitis B virus (HBV) and hepatitis C virus (HCV) have common ways of transmission. These infections represent the most important public health problem for Georgia, especially in PWID. Since 2015 Hepatitis C Elimination Program has been carried out in the country, which in addition to HCV infection diagnosis and antiviral treatment (which certainly reduces the spread of HCV in the population), also includes specific preventive activities in various population groups, including PWID [11,12]. Accordingly, preventive measures against HCV infection plays significant role in the prevention of spread of HIV infection as well.

It is important that the country prepares for widescale hepatitis B treatment and prevention activities, especially among key populations. Therefore, it is essential to study the prevalence, level of knowledge and attitude about this disease. It should be noted that the assessment of HBV vaccination history and attitude towards the vaccine is a new component of the current IBSS study, which was not conducted in previous IBSS studies.

This report describes the Integrated Bio-Behavioral Surveillance Survey (IBBSS) among PWID conducted in 2022 in seven cities Georgia.

Goal and objectives

The goal of the study was to estimate the prevalence of HIV infection, hepatitis B and hepatitis C, and evaluate risk behaviors among PWID in Georgia.

Study objectives:

1. Estimate the prevalence of HIV infection, hepatitis B and hepatitis C among PWID
2. Determine HIV-related risk behaviors among PWID
3. Evaluate the trend of illegal drug use among PWID
4. Evaluate the knowledge, attitudes, and self-assessment of risk related to HIV and HCV infections among PWID
5. Evaluate the coverage of preventive programs among PWID

Methods

Study design

The study design was cross-sectional, using Respondent Driven Sampling (RDS) method. The study included behavioral and biomarker components. Behavioral component implied face-to-face interviewing of study participants with specially designed structured questionnaire. Biomarker component included blood testing of surveyed study subjects for HIV infection, hepatitis B and hepatitis C.

Study site

The study was conducted in seven major cities of Georgia: Tbilisi, Gori, Rustavi, Telavi, Batumi, Zugdidi, and Kutaisi.

Sample size

The sample size for each city was determined by exact matching to the sample sizes of IBSS 2017. The minimum number of PWID participating in the study was determined to be 2000 individuals, including 380 PWID in Tbilisi and 270 PWID in other cities (each city). Finally, the total number of PWID involved in the study was 2005, and the number of participants according to cities was distributed as follows: Tbilisi - 380 participants, Zugdidi - 275 participants, and all other cities - 270 participants (Table 1).

Table 1. Number of study participants by cities

City	Number of participants
Tbilisi	380
Zugdidi	275
Batumi	270
Kutaisi	270
Gori	270
Telavi	270
Rustavi	270
Total	***2005***

Sampling

Criteria for selection of study participants

Selection of potential study participants and inclusion in the study was done according to the following inclusion and exclusion criteria:

Inclusion criteria:

- Age ≥18 years

- Drug injection practice during the last 30 days
- Residence in the selected city
- Ability to answer the questionnaire prepared in Georgian language
- Willingness and ability to give informed consent for study participation, namely, to sign the informed consent form specially designed for the study
- Consent to participate in both components of the study (questionnaire completion and venous or capillary blood collection for testing for HIV infection, hepatitis B and hepatitis C).

Exclusion criteria:

- Already participated in the current study
- Refusal to participate in any study component
- Inability to give informed consent (including due to being under the influence of alcohol or drugs)
- Not having a valid coupon

Recruitment of study participants

Like other key populations, PWID are stigmatized groups, making them hard to reach by conventional population-based sampling methods. Therefore, statistically valid sampling methods for key populations were developed. One of these methods is Respondent-driven Sampling (RDS), which involves recruitment of research participants by other participants. RDS method is based on social network theory and includes non-probability "snowball sampling" with mathematical modeling, which allows to weight the sample and get closer to representative estimates as much as possible. Although the RDS methodology has limitations such as sampling bias, it is widely used worldwide to include hard-to-reach populations in research.

Respondent-driven sampling started by purposive selection of "seeds" – initial study subjects representing target population. Besides the study inclusion and exclusion criteria, additional factors were considered during the selection of "seeds". Namely, "seeds" should have access to different groups of PWID, which ensured a diversity of the sample. Different age, social and geographical characteristics were also considered during the selection of "seeds".

In each city 3 to 7 "seeds" were selected, as much diverse as possible according to different characteristics (age, sex, connection to different groups of PWID, residential area). The selection of "seeds" was carried out by the organizations of Georgian Harm Reduction Network (GHRN), which have extensive experience of working with PWID. To reduce the over-representation of the beneficiaries of GHRN receiving preventive services in the sample and thus not to get an underestimation of risky behaviors, the selection of "seeds"

was also conducted by the non-governmental organization "Health Research Union", which has many years of experience working with PWID.

Table 2. Social-demographic characteristics of "seeds" by cities

Characteristics	Tbilisi	Gori	Rustavi	Telavi	Batumi	Zugdidi	Kutaisi
Age groups							
18-24	0	0	0	0	0	0	0
25-30	1	0	0	0	1	1	0
31-40	2	1	2	0	2	5	1
41+	4	2	1	3	2	1	2
Gender							
Male	7	3	3	3	4	7	3
Female	0	0	0	0	1	0	0
Ethnicity							
Georgian	6	3	3	3	3	7	3
Other	1	0	0	0	1	0	0
Refused to answer	0	0	0	0	1	0	0
Level of education							
High school or vocational college	4	3	3	1	5	2	0
Incomplete university	1	0	0	0	0	0	0
University	2	0	0	2	0	5	3
Marital status							
Married	6	2	0	3	0	4	3
Divorced/Separated	1	1	2	0	3	1	0
Widow	0	0	0	0	1	0	0
Single	0	0	1	0	1	2	0
Employment							
Permanent job	1	1	1	3	0	1	1
Irregular job	1	2	0	0	1	3	0
Unemployed	5	0	2	0	4	3	2
Monthly income							
<300	2	0	2	0	3	0	0
300-700	1	3	0	2	2	4	1
700-1000	0	0	1	0	0	1	0
>1000	3	0	0	1	0	2	1
Refused to answer	1	0	0	0	0	0	1
Total	**7**	**3**	**3**	**3**	**5**	**7**	**3**

Enrollment of the selected "seeds" in the study was done after signing specially designed informed consent form. After study enrollment the "seeds" participated in behavioral (interviewing) and biomarker (blood sampling) components. After completing these procedures, each "seed" was given three coupons with special, unique code to recruit

three PWID from their social network for study participation. The "seeds" were instructed in detail how to recruit potential participants. All coupons had serial numbers, location of study sites and information about monetary reward. "Seeds" were offering their peers to participate in the study and giving coupons to those who agreed. Potential study subjects should present coupons for study participation. Each of the three PWID recruited by the initial seed to participate in the study represented the first wave of recruitment. These participants were also given coupons to recruit three other PWID from their social networks to participate in the study, representing the second wave of recruitment. Participants of the second wave were similarly given three coupons to recruit three other PWID and this process continued until the desired number of study participants was reached. The distribution of recruitment coupons was discontinued shortly before the desired number of respondents was reached. The desired sample size was achieved in all seven cities selected for the study. The number of waves from the "seeds" varied by cities. The minimum number of waves was in Rustavi (6 waves), and the maximum number was in Telavi (14 waves) (Table 3).

Table 3. Information about recruitment

Study site	Maximal number of waves	Total number of coupons issued	Number of returned coupons	number of respondents recruited by „seeds“
Tbilisi	11	571	380	373 (7)
Gori	10	808	276	267 (3)
Rustavi	6	517	270	267 (3)
Telavi	14	763	270	267 (3)
Batumi	8	564	270	265 (5)
Zugdidi	9	535	275	268 (7)
Kutaisi	7	801	270	267 (3)

The recruitment of study participants included a double incentive system: a primary reward for participating in the study and a secondary reward for recruiting other PWID into the study. The primary reward was 20 GEL (approximately 7 USD), and the secondary reward was 10 GEL (approximately 3.5 USD) for the inclusion of each new respondent in the study.

Data related to coupons were entered into a coupon management computer software space designed specifically for the study.

Before inclusion in the study, each potential participant underwent verification procedure, which allowed to verify that the individual really met study inclusion criteria. The procedure included an informal interview with the potential study subject about drug prices, slang names, preparation, and injection techniques. In addition, objective signs of injecting drug use were assessed.

As a result of the verification procedure, certain number of the potential participants (42 people in total) were refused to participate in the study because they could not meet the study inclusion criteria. Two potential study subjects refused to participate in the study despite meeting the study inclusion criteria.

During the study enrollment, each participant was assigned a 15-digit unique identification code, which was recorded in the identification database to avoid duplication of the study subjects. The unique codes were generated using first letters or digits of name, surname, mother's and father's names, place of birth, gender, etc. of the study subjects.

Data collection

In all seven cities, data collection (field work) took place during May-June, 2022.

Behavioral component

Data collection was carried out through individual, face-to-face interviews. The survey tool was a structured questionnaire developed within the frames of the IBSS 2017. Prior to the fieldwork the questionnaire was adapted by a group of experts in the field and some questions were added, such as, questions to assess hepatitis B vaccination practices and attitudes, as well as risk behaviors associated with being in penitentiary facilities. PWID size estimation study was conducted in conjunction with the IBSS, so the questionnaire included questions related to this topic.

During the study, the Rapid Opioid Dependence Screen (RODS) [13] was used, which is proposed for the identification of opioid dependence in clinical and research settings. The test consists of 8 questions; the first question identifies the ever use of opioids. The rest of the 7 questions evaluate the psychological, behavioural, and cognitive changes associated with opioid use. RODS has shown good-to-strong sensitivity (0.97) and specificity (0.76); Positive predictive value (0.69) and negative predictive value (0.98). By concordance analysis the RODS revealed moderate diagnostic agreement (κ=0.67), internal consistency (α = .92) and inter-item correlations (0.66 - 0.87). RODS screening tool is in line with the diagnostic criteria of substance use disorder according to Diagnostic and Statistical Manual of Mental Disorders 4th edition (DSMIV) [14]. In this study, the questionnaire has been shortened and the last, 8th question, has been removed, which assesses missing important things because of opioids (doctor's appointment, family/friend activities). Accordingly, the tool consisted of 7 questions instead of 8. The diagnosis of opioid dependence is made if the answer to the first and at least 3 questions out of the rest of the questions are positive (the sum of 4 or more positive answers are required for the diagnosis of opioid dependance).

The study participants were interviewed by interviewers specially trained for this study. The interviewers were selected from the employees of "Health Research Union" and organizations of GHRN, who had experience in working with PWID and conducting similar studies. At the beginning of the study, all interviewers participated in 2-days training, which included instruction, practical exercises, and piloting of all research procedures, such as enrolling subjects in the study, obtaining informed consent, conducting interviews, etc. During the training, all interviewers had the opportunity to review the study protocol and data collection instruments.

Interviewers conducted face-to-face interviews in a private environment with full confidentiality. The average duration of the interview was 30-40 minutes. Data collection was carried out at the following sites: clinic NEOLAB (Tbilisi, Batumi, and Zugdidi branches), also organizations of GHRN, namely, Union "New Vector" (Tbilisi and

Rustavi branches), Union “Imedi” (Batumi), Medical Psychological Connection “Step Forward” (Gori and Telavi branches), Young Psychologists and Doctors Association "Xenon" (Zugdidi), and Psycho-Social Information and Consultation Center "New Road" (Kutaisi).

As a result of the survey, the following information was collected from the study participants: socio-demographic characteristics; history of drug use and risky behavior related to drug use; sexual history and risky sexual behavior; knowledge, attitudes and risk perceptions on HIV and HCV; history and attitude about HBV vaccine; use of preventive programs, and social factors related to drug use.

Biomarker component

The biomarker component of the study included testing of blood samples for HIV infection, hepatitis B and hepatitis C.

Rapid tests (On Site HIV1/2 Ab Plus Combo Rapid test, CTK Biotech) or Abbott ELISA (HIV Ag/Ab Combo Reagent Kit, ARCHITECT i1000SR) were used to screen for HIV infection. Confirmation of anti-HIV positive cases were performed at Infectious Diseases, AIDS, and Clinical Immunology Research Center.

Screening for anti-HCV (hepatitis C virus antibodies) was performed by rapid tests (On Site HCV Ab Plus Combo Rapid test, CTK Biotech) or ELISA (HCV Ab – CVAB, Diagnostic BioProbes Srl- Dia-pro). Confirmation of anti-HCV positive cases was done by detecting HCV RNA by Polymerase Chain Reaction (PCR) (HCV Real-TM Quant Dx, Sacace Biotechnologies) at clinic Neolab.

Rapid tests (On Site HBs Ag Combo Rapid test, CTK Biotech) were used for the screening for HBsAg (hepatitis B virus antigen). Conformation of HBsAg positive cases was performed by ELISA (HBsAg one Version ULTRA, Diagnostic BioProbes Srl- Dia-pro) or Abbott ELISA (HBs Ag Qual II Reagent Kit, ARCHITECT i1000SR) at clinic Neolab.

After completing the behavioral component, the study participants were asked to provide voluntarily blood samples for HIV, hepatitis B and hepatitis C testing. If the study participant consented, an experienced nurse was taking 3-5 ml of blood sample after pre-test counselling.

Blood samples were sent to the laboratory of clinic NEOLAB (Tbilisi branch). If blood could not be transported on the same day, the collected samples were centrifuged, and the serum was stored in a refrigerator at 4-8^{0}C. Laboratory tests were carried out through linked-to-respondent anonymous testing method. Each study participant had unique 15-digit identification code, which was noted both on the questionnaire and on the blood collection tube. Confirmatory laboratory test results were notified to the study participants within 1 week.

Study participants who were diagnosed with HIV infection, hepatitis B or hepatitis C by confirmatory testing were referred to appropriate diagnostic and treatment facilities.

Research ethics

Study participation was voluntary. Each potential study participant was informed about the purpose, objectives, methods, procedures, risks, and benefits of the study. All individuals who agreed to participate in the study signed an informed consent form and then were enrolled in the study. Anonymity of the study participants was protected. The identity of the participants was not recorded, only the 15-digit code of the respondent was mentioned on the entire documentation. In case of positive screening test result on HIV infection, hepatitis B or hepatitis C, the participant's identification data (name, surname, personal number) was obtained for confirmatory testing.

Before initiation of field work, the study protocol and instruments were reviewed and approved by Institutional Review Board of Health Research Union (IRB00009520; IORG005619).

Data analysis

Data entry, management and statistical analysis were performed using statistical software SPSS v22. Descriptive statistical methods were used to characterize the variables studied in the target populations. The study variables were compared between different study groups using t-test statistic for quantitative and chi-square tests for categorized data. Logistic regression model was used for multivariate analysis to identify independent predictors of some outcome variables. The selected indicators were compared with the IBSS 2017 data. The structures of social networks of PWID and the recruitment data were analyzed using network visualization program (NetDraw 2.179).

Respondent Driven Sampling - modified (RDS-MOD) approach has been applied to determine the estimates of proportions of population parameters (Estimate, 95% CI) that determines a single normalized weight for each participant [15]. This method converts the RDS data into clustered data to account the pre-existing associations during recruitment process and Taylor series linearization method is applied to calculate confidence intervals. This approach makes it possible to apply diverse statistical methods to perform analysis of data collected by RDS approach using routine statistical software. Our calculations were performed by the R package “Survey” for analysis of complex survey samples, v.4.1-1. The generation of the weights for the subjects was based on the assumption that a recruiter is recruiting the subjects independently with probability proportional to network size of the recruiter - assumption proposed in previous works [16]. Data for the study subjects in the recruitment network were converted into clusters by discarding all seeds and the remaining branches were considered as clusters [15]. The RDS-MOD approach generates results similar to the RDS II method [17] and enables

analytical calculation of point estimates and CIs. RDS-MOD estimates are shown in the (Tables 1.3.1-1.3.1.0)

Results

Socio-demographic characteristics of study participants

2005 PWID participated in the study (Tbilisi - 380, other cities - 270 in each city). 70.4% (n=1412) of respondents never participated in similar studies. 16.7% (n=334) of participants have participated once, 6.1% (n=122) – twice, and 5.5% (n=110) – more than 2 times. 94.8% of those who have participated in a similar study were notified about their HIV test result. 4% (n=80/2005) of PWID have participated in Lite BSS (Table Q1)

The majority of study participants are older than 40 years (n=1267, 63.2%), 3% are 18-24 (n=60), 7.4% - 25-31 (n=149), and 26.4% - 31-41 (n=529). 98.6% (n=1977) of respondents are male. 91.1% (n=1826) of PWID are Georgian and 3.8% represent other ethnicities (n=76). The majority of respondents (n=1212, 60.4%) have received secondary education. More than half of PWID are unemployed (n=1177, 58.7%), 23% (n=461) have an occasional job, whereas only 13.1% (n=262) are permanently employed. For 22% (n=441) of respondents, the average monthly income ranges between 500 and 700 GEL, for 18.4% (n=369) between 100 and 300 GEL, and for 17.5% (n=351) - above 1000 GEL. 49.1% (n=985) of PWID are married, 22.3% (n=448) - divorced, and 25.8% (n=517) have never been married.

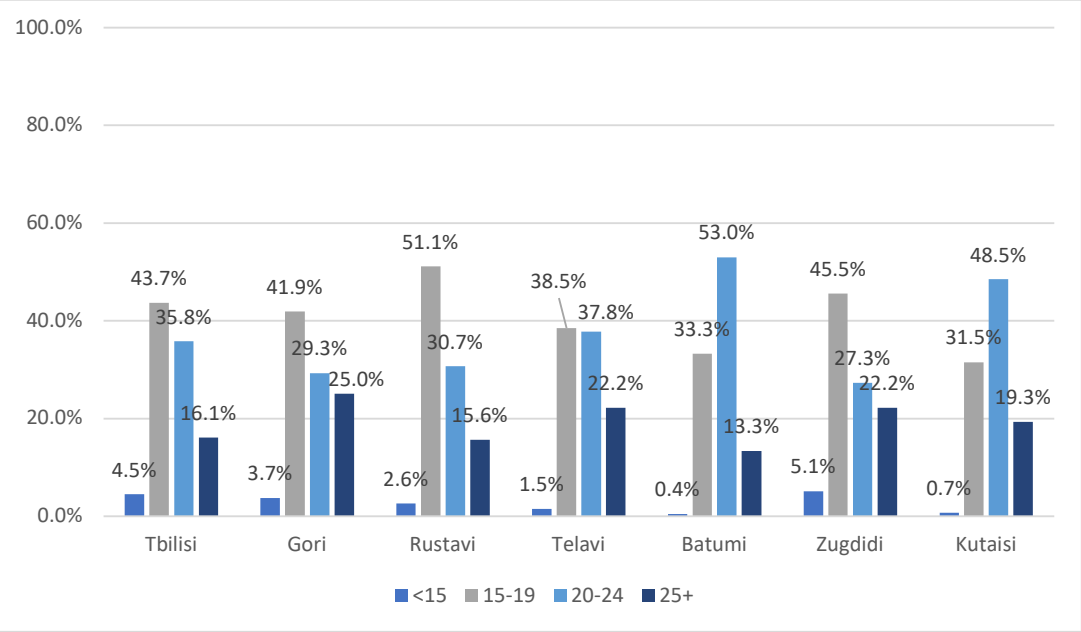
42.5% (n=853) of respondents live with their spouses, 30.7% (n=615) with parents or relatives and 18.8% (n=377) live alone (Table A1). 51.3% (n=1029) of participants have been imprisoned. 6.4% (n=66) of PWID were minors when imprisoned for the first time, 52.4% (n=539) were aged 18-31, and 19.4% - over 30 years. Out of those imprisoned 71.4% (n=735) served for more than 1 year. During the last imprisonment, 28% (n=288) of PWID spent more than 2 years in prison, 20.3% (n=209) spent 1-2 years, and 16.3% (n=168) - 3-6 months (Table A1).

22.5% (n=232) of those PWID who have ever served a prison sentence reported using drugs while imprisoned. During the last 12 months, 5.5% (n=57) of PWID have received an administrative sentence. 3.9% (n=40) of PWID were detained because of drug use and 1.7% (n=17) were imprisoned during the last 12 months. 16.9% (n=174) used drugs within a day after their discharge from prison, and 20.1% (n=207) used them within 2-15 days.

Drug Use History

62.2% (*n*=1,248) of study participants first used drugs as adolescents, at the ages of 15-19. The first instance of drug use included both injection and non-injection routes (swallowing or smoking). The median age of first drug consumption was 17 years (SD 3.97) in all cities except Gori, where the median age was 18. The respondents of Tbilisi (16.1%), Kutaisi (14.8%), and Zugdidi (13.1%) have the highest rates of drug use before the age of 15. The median age of onset of injection drug use is 20 years for the whole sample, however, the majority of participants (40.9%) reported the first injection at the ages of 15-19. Only 2.7% of participants reported the experience of injecting before the age of 15. The median age of the first injection, across cities, range between 19 (Rustavi and Zugdidi) and 21 years (Kutaisi). The rate of injection drug use before the age of 15 was slightly higher in Zugdidi (5.1% of respondents), Tbilisi (4.5%), and Gori (3.7%) (Figure B1).

Figure B1. The frequency distribution of the age of first drug injection across cities



More than two-thirds of those questioned (70.8%) think that they're dependent on drugs, with Batumi having the highest rate (**Table 1**). One-fourth of respondents (516; 25.7%) don't think that they're dependent on drugs, but among those who do (1,420; 70.8%), the duration of dependence varies over a wide range, between a minimum – of 6 months to a maximum – of 48 years (**Table B1**)

Table B1. The distribution and duration of perceived drug addiction across cities

Cities	Think that has addiction (%)	The median year of drug addiction
Tbilisi	74.2	15.0
Gori	60.4	10.0
Rustavi	78.5	20.0
Telavi	42.6	13.0
Batumi	97.4	10.0
Zugdidi	79.6	10.0
Kutaisi	61.5	10.0

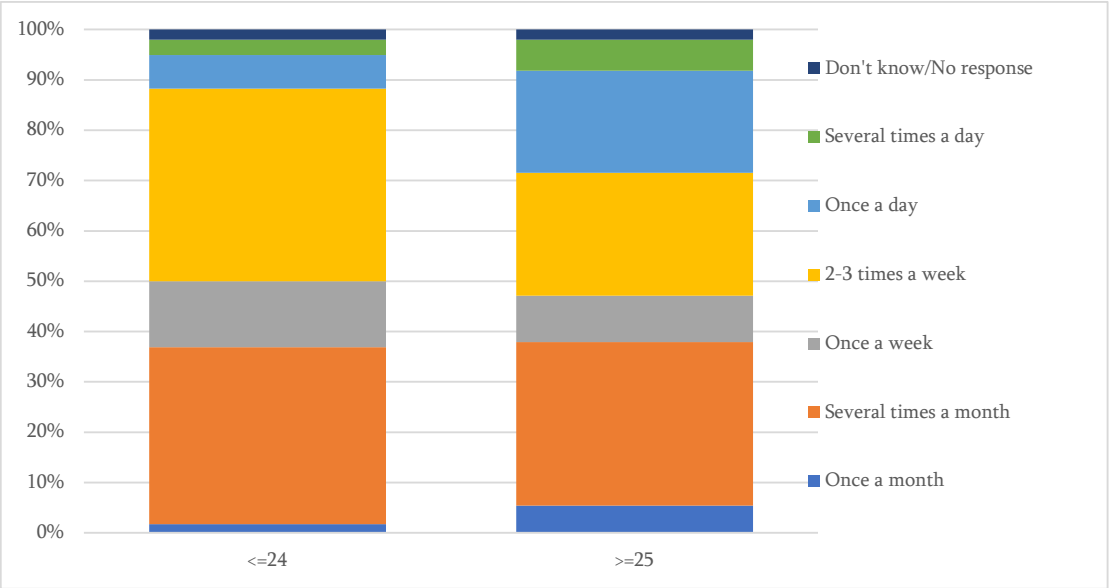
Out of those respondents with self-perceived drug addiction or report less than 5 years of drug dependence (822; 41%), 439 (53.4%) have received a syringe/needle or another injection kits, 379 (46.1%) – a condom, and 338 (41.1%) – brochures/pamphlets/booklets on AIDS prevention for free of charge.

Three-fourths of the sample report the practice of drug injection in groups during the last 6 months. 24% of respondents inject drugs with an inconsistent group and twice as much (48.7%; 977) report injecting with the same PWID, meaning with the regular group of injectors. Only one-fourth of respondents (25.8%; 518) report the individual practice of drug injection. Across cities, the rate of drug injection with the regular group is the highest in Rustavi (74.1%; 200) and Zugdidi (56.4%; 155), whereas the rates of individual drug injection practice were the highest in Telavi (38.5%; 104) and Kutaisi (34.1%; 92). The majority of participants (16.2%; 325) report drug injection with regular groups of 3 people on average. Across cities, the number of people injecting in groups varies from 3 (Batumi) to 4 (Telavi).

One-third of respondents (32.4%; 649) report injecting drugs several times a month, and 6.1% (123) report injecting several times a day - during the last month.

The respondent from Rustavi (25.2%; 68) most often report injecting drugs several times a day, this rate is the lowest in Telavi (3.3%; 9). Participants of 25 years of age and above more often inject drugs every day and several times a day, injecting 2-3 times a week is more characteristic to participants less than 24 years old (**Figure B2**).

Figure B2. Injection frequency by age



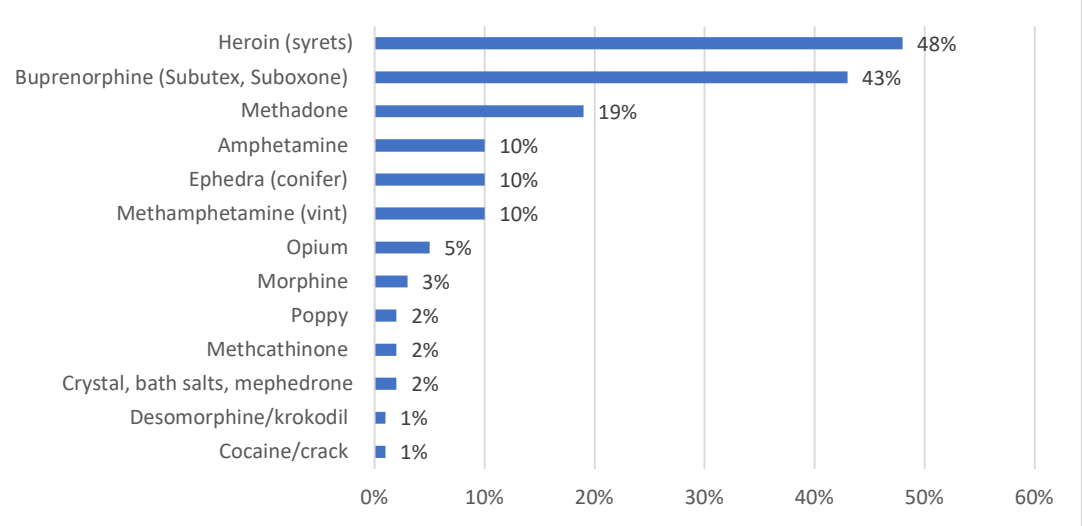
81.6% (1,637) of respondents report the use of non-injection drugs during the last month. Among non-injection drugs, most prevalent is the use of hemp and its products, opioids (methadone), and nonbarbiturate sedatives. Out of those who reported non-injection drug use during the last month 55.5% (1,111) used hemp products (Marijuana, Hashish, Anasha), followed by Methadone (18.5%; 371), Diazepam (18%; 360), Clonazepam (14.5%; 290), Baclofen (10.8%; 217), Gabapentin (10.2%; 204), Buprenorphine (8.7%; 174) and Pregabalin (6.5%; 130). Out of non-injection new psychoactive substances (NPS), the use of synthetic cannabinoids (Bio, spices, chocolate) is the most prevalent among respondents, used by 4.5% (90). The use of synthetic stimulants (Crystal, bath salts, Mephedrone, bio-MDMA) was reported by 2% of respondents, and synthetic hallucinogens (Bio-LSD/Nbome) by 1.4% (**Table B2**)

Table B2. Non-injection psychoactive substance use across cities during the last month

Cities	Hemp products	Methadone	Diazepam	Clonazepam	Baclofen	Gabapentin	Buprenorphine	Pregabalin
Tbilisi	15.9	16.7	19.2	19.7	19.8	26.5	17.8	21.5
Gori	19.4	15.4	18.1	11.7	13.4	7.4	47.1	5.4
Rustavi	11.3	15.4	18.3	11.7	3.2	3.4	5.2	0.8
Telavi	15.3	11.9	20.3	7.6	19.4	18.1	6.9	1.5
Batumi	20	16.4	14.4	16.6	1.8	3.9	10.3	6.9
Zugdidi	3.6	14	2.2	10.3	15.7	6.4	3.4	6.9
Kutaisi	14.5	10.2	7.5	22.4	26.7	34.3	9.2	56.9
Georgia*	55.5	18.5	18	14.5	10.8	10.2	8.7	6.5

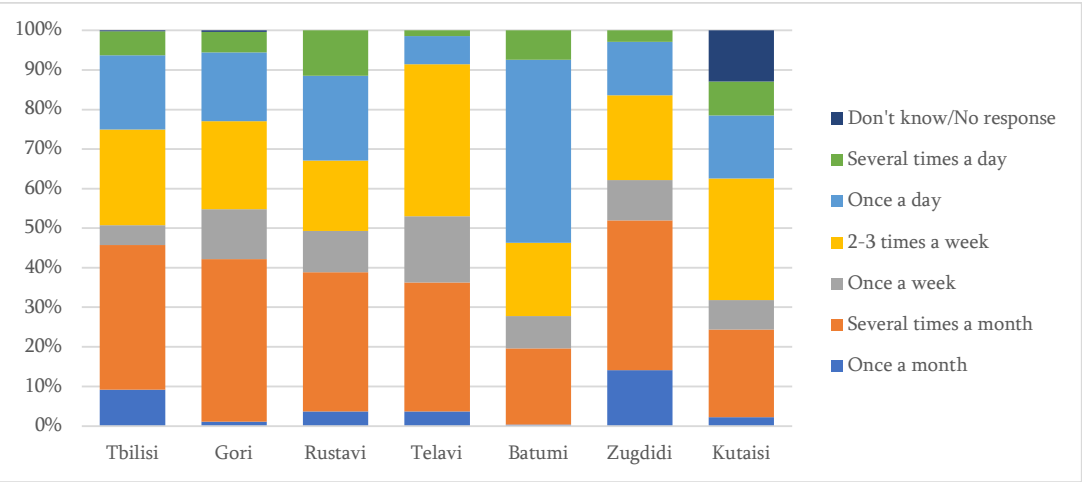
Heroin, Buprenorphine, and Methadone make up the top 3 substances injected during the last month. Suboxone (663; 33.1%) and Heroin (603; 30.1%) prevail as the last used substances (Figure B3). Methadone (259; 12.9%), Subutex (163; 8.1%), Amphetamine (112; 5.6%), and Ephedrine (93; 4.6%) have been used significantly less as the last substance injected. 523 respondents (26%) from the whole sample report everyday injections during the last month.

Figure B3. Injection drugs used during the last month



Respondents from Batumi mostly report daily injections, but the majority of respondents from Rustavi report injecting several times a day compared to other cities (**Figure B4**). This difference between cities is statistically significant.

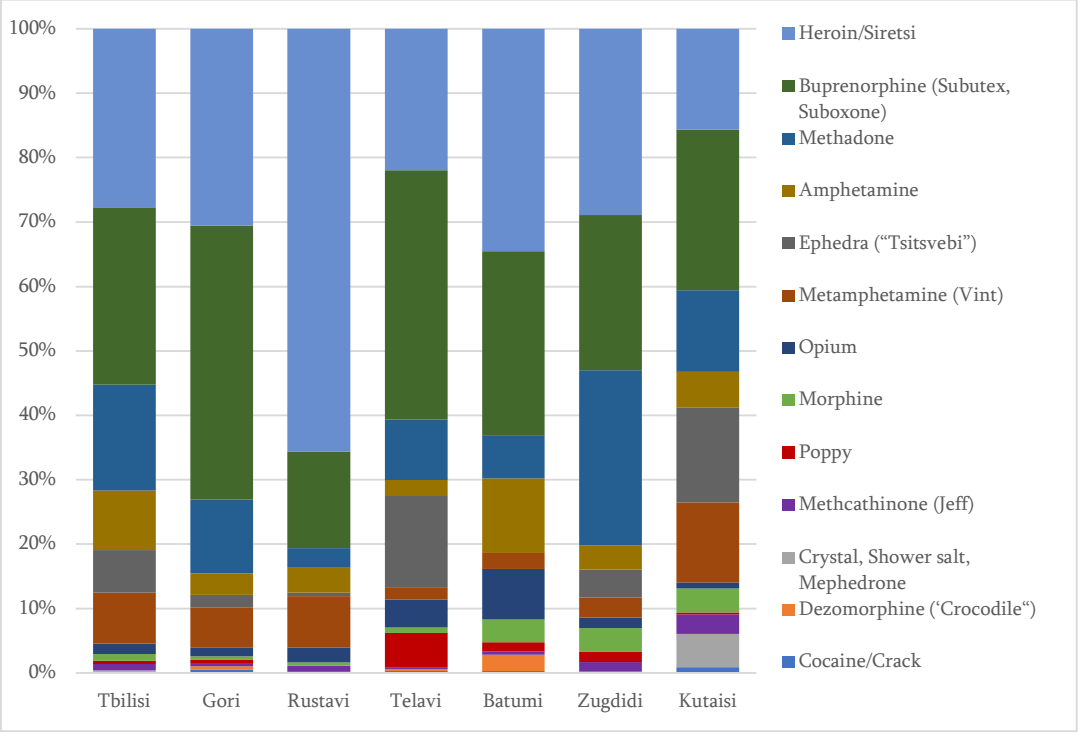
Figure B4. The frequency of injection of drugs across cities



The list of opioids injected during the last 12 months doesn't much differ from that injected during the last month. Out of opioids Heroine (54.7%) and Buprenorphine (Subutex, Suboxone) (51.9%) were most commonly reported, followed by Methadone (36.5%), Opium (8%), and Morphine (5%).

In terms of substances used during the last month, the picture is different across cities. The odds of use of opioids is statistically significantly higher in Rustavi (OR = 3.1, 95% CI:1.8-5.6), Tbilisi (OR = 0.2, 95% CI:0.2-0.3), Batumi (OR = 2.8, 95% CI:1.6-4.8) and Zugdidi (OR = 1.8, 95% CI:1.1- 2.8) compared to other cities (Figure B5)

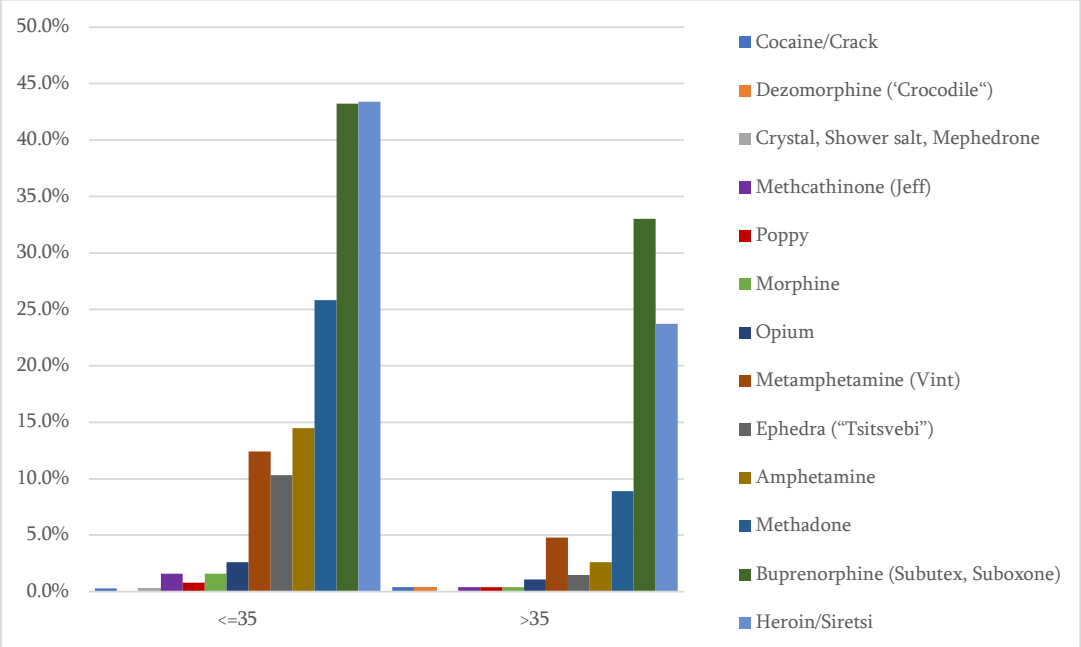
Figure B5. The drugs injected during the last month across cities



Compared to Tbilisi (OR = 0.2, 95% CI:0.1-0.3), the odds of injection of stimulants is significantly higher in Rustavi (OR = 0.4, 95% CI:0.3-0.6), Telavi (OR = 0.6, 95% CI:0.4-0.8), Zugdidi (OR = 0.4, 95% CI:0.3-0.6) and Kutaisi (OR = 2.1, 95% CI:1.5-2.9) the injection of new psychoactive substances (NPS) is significantly higher only in Kutaisi (OR = 29.1, 95% CI:6.9-121.9).

The odds of injection of stimulants (OR = 1.7, 95% CI:1.4-2.1) and new psychoactive substances (NPS) (OR = 5.4, 95% CI:2.9-10.4) is more common in older (>35) participants compared to adults less than 35 years old (Figure B6)

Figure B6. The drugs injected during the last month across the age groups of >35 and <=35 years old

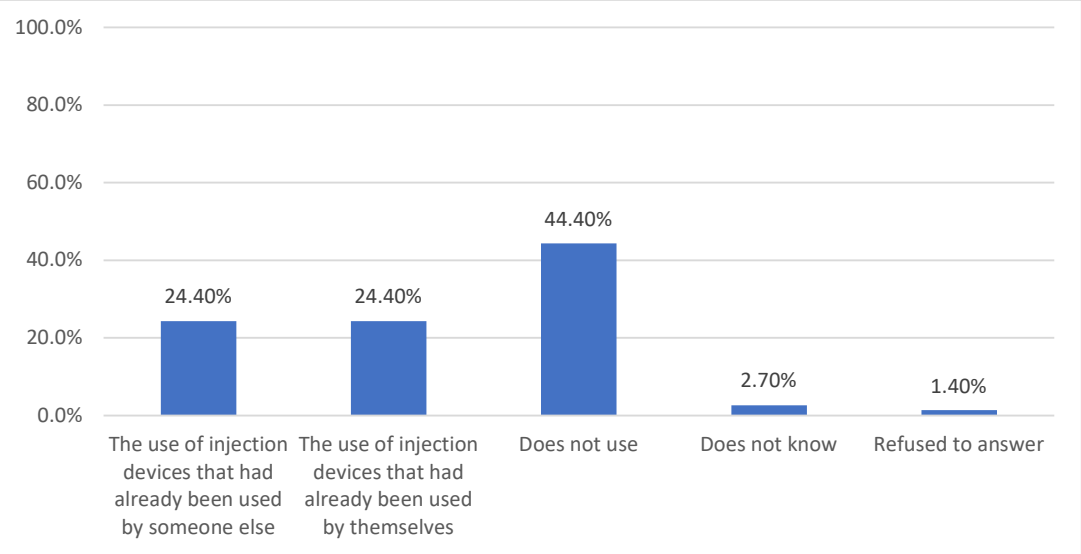


Every 4 respondents (42,8%) out of 10 reported episodes of regular opioid use (daily injection/consumption) lasting one week or more and one month or more within last 12 months. Heroine (30.1%), Suboxone (28.9%), Methadone (27.7%), and Subutex (9.3%) were among the most common regularly used opioids. The RODS tool was used among people who inject drugs who reported using opioids during the last 12 months. 97% (1,943 respondents) of the whole sample reported using opioids during the last 12 months. Based on RODS, 753 respondents show dependence on opioids. More than half (55%) of the whole sample reported withdrawal symptoms after rapid tapering or sudden discontinuation of drug use during the last year. Also, almost one-fourth of respondents have shown dependence on opioids (meaning the use of opioids at least once a day during the last month).

Risk behavior associated with injection drug use

40.3% (n=808) of participants reported the use of needle/syringe/butterfly syringe that had already been used by themselves and 24.4% (n=490) reported the use of injection equipment that had been used by someone else (Figure C1).

Figure C1. The practice of using injection equipment already used by someone else



2.4% (n=25) and 1.6% (n=16) of PWID last injected drug using needle/syringe/butterfly syringe used by someone else with and without prior cleaning, respectively. During the last injection 14.8% (n=153) of respondents re-used this equipment used by themselves. According to 4.8% (n=50) of PWID, during the last injection, the injecting equipment was shared between 1-4 people. 3.1% (n=32) of participants reported sometimes using needle/syringe/butterfly syringe used by someone else, 1.7% (n=18) used it once and 87.0% (n=897) have never used it. 23.9% (n=246) of PWID report sometimes using needle/syringe/butterfly syringe already used by themselves, 7.5% (n=77) report using it once, 1.8% (n=19) have never used it. 64.2% (n=224) of respondents reported cleaning of equipment used by themselves or someone else before injection, during the last one month. 94.4% (n=308) of participants cleaned them using just water. 36.1% (n=30) of PWID said that they shared needle/syringe/butterfly syringe with their friend at least once during the last one month, 24.1% (n=20) - reported sharing with another drug user. During the last one month 17.0% (n=341) of respondents sometimes used syringe filled beforehand, 8.0% (n=161) of them used it only once, 2.2% (n=44) almost always used it, 68.4% (n=1373) report never using it (Table C1).

21.8% (n=438) of participants report the use of a syringe filled beforehand during the last drug use. According to the 3.1% (n=62) of PWID, the last time they injected the drug it was filled with the drug someone else's syringe.

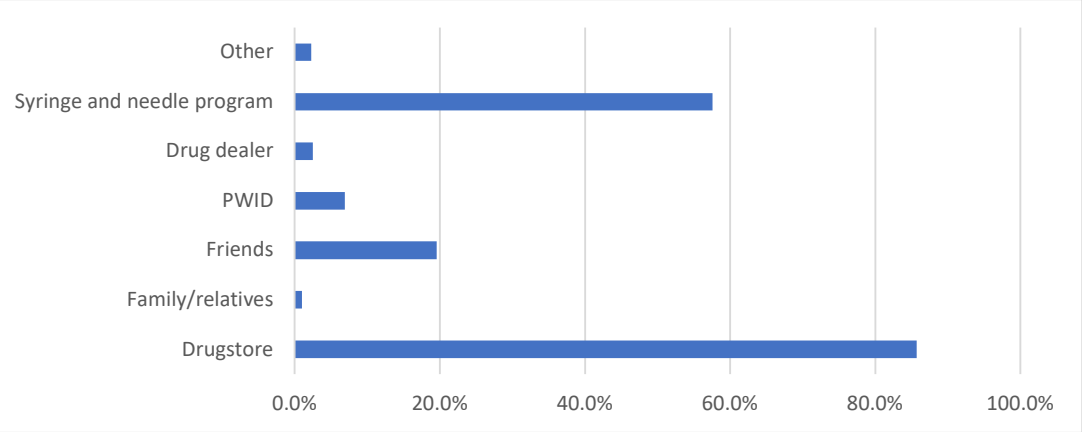
According to the 3.1% (n=62) of PWID, the last time they injected the drug, their syringe was filled with the drug from someone else's used syringe. During their last episode of taking drugs, 1.6% (n=33) of participants used the drug that was left in the syringe by someone else, 19.7% (n=395) used shared large syringe, bottle, spoon, boiling pan/glass/flask, cotton/filter or water which was in touch of the needle/syringe used by someone else. 20.0% (n=400) of PWID used the drug solution from the container that had been prepared without their presence (Table C1).

The use of new and sterile needles/syringes/butterfly needles

Most of the surveyed PWID (88%) reported the use of sterile injecting equipment the last time they injected drugs. This indicator was higher among women (92.9%) compared to men (87.9%). Using sterile injecting equipment at last injection was also higher among younger (<25 years) PWID compared to older (≥25 years) ones (90% vs. 87.9%) (Table C1).

During the last 30 days, 53.0% (n=1063) of participants received sterile needles from the NSP. 77.3% of PWID report getting sterile needles from the drugstore (Figure C2).

Figure C2. Sources of sterile needles



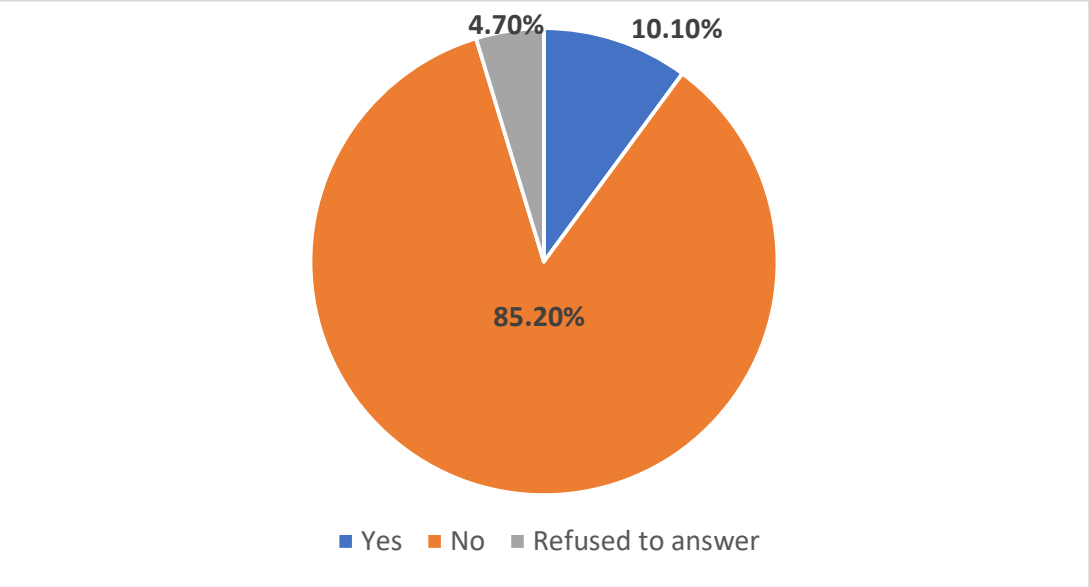
After the last episode of drug use 47.7% (n=956) of participants threw the needle into the garbage bin with a cap, 34.2% (n=686) bent/broke the needle and threw it into the garbage bin, 5.2% (n=104) threw the needle into the garbage bin without a cap and 5.0% (n=101) burnt it in an oven. During the last month 78.7% (n=1578) and 15.0% (n=301) of PWID report to have always and almost always used new and sterile needles/syringes/butterfly needles, respectively. 3.4% (n=68) used them sometimes and 0.9% (n=18) reported never using. 99.7% (n=1999) of participants think that they can get new and sterile syringes and needles whenever they might need them. 85.7% (n=1714) of

PWID buy sterile needles/syringes in a drugstore, 57.6% (n=1151) receive them through a syringe and needle program, 19.6% (n=392) through a friend, 6.9% (n=138) and 2.5% (n=50) though another drug user and drug trafficker, respectively. 1.0% (n=20) receive sterile needles/syringes from family/relatives (Table C1).

The information regarding drug overdose

16.4% (n=329) of PWID report using drugs in another city/town in Georgia during the last year, and 9.8% (n=196) report using drugs in another country. 10.1% (n=202) of participants have experienced an overdose in Georgia during the last year, 43.1% (n=87) of which received Naloxone through a friend, 23.3% (n=47) received emergency aid on site and 6.9% (n=14) received hospital treatment.

Figure C3. Cases of injection drug overdose



During the last year, 25.5% (n=511) of respondents reported witnessing someone experiencing an overdose of which 63.0% (n=322) administered Naloxone and 19.4% (n=99) called emergency services. 16.0% (n=36) of PWID who witnessed someone experiencing an overdose reported the emergency services informing the police (Table C1).

Information on places of drug use

To determine the location of drug use, the respondents were asked where they most often used the drugs. The majority (81.4%) reported using at home. 17.2% of participants

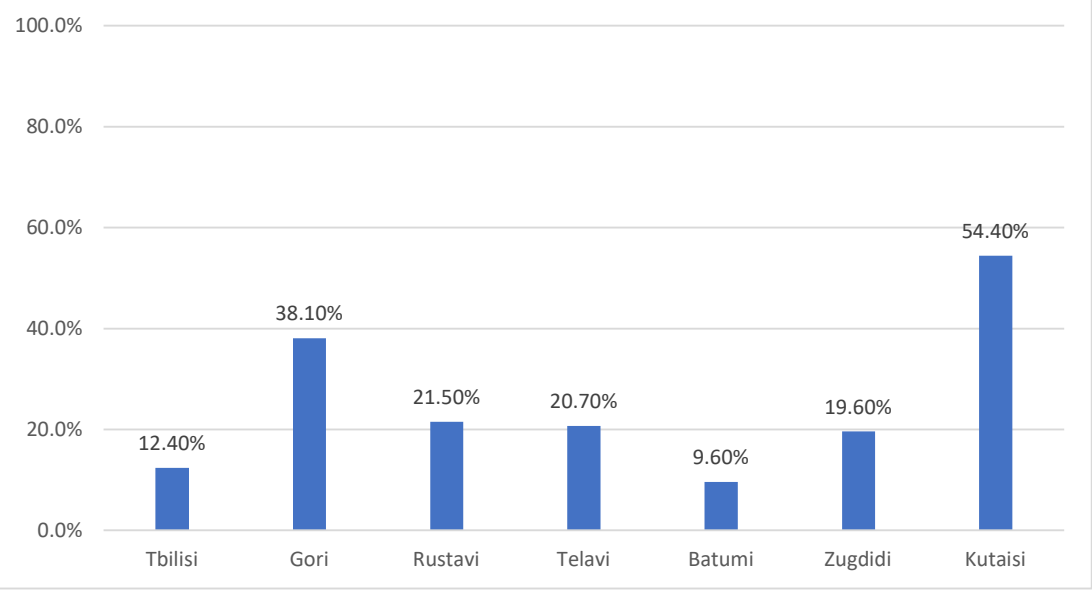
declared that they have used drugs in the automobile, 12.5% - in non-residential space and 13.3% have used drugs wherever it was possible.

A very small percentage of the PWID used the drug on the street (3.6%), in the entrance hall (3.6%), in an open space (forest, riverbank, seashore) (6.4%) and in the same place where they bought the drugs (1.8%).

Risk Behavior of Drug Use Across Cities

Several variables showed a statistically significant difference between Tbilisi and other cities (Table C2.1, C2.2, C2.3). The highest rates of sharing a needle/syringe/another injection device already used by someone else were reported in Kutaisi (n=147, 54.4%; p<0.001) and Gori (n=103, 38.1%; p<0.001) (Figure C4).

Figure C4. The practice of using injection devices already used by someone else across cities



In PWID the use of injection devices already used by themselves is significantly different across cities: Kutaisi—64.1% (n=173), Batumi—57.8% (n=156), Tbilisi—45.0% (n=171), Rustavi—39.6% (n=107), Zugdidi—38.2% (n=105), Telavi—28.5% (n=77) and Gori—7.0% (n=19). The rates of using a syringe filled beforehand during the last month were the highest in Batumi (n=165, 61.1%) and Kutaisi (n=100, 37.0%). The highest rates of reusing a needle/syringe/another injection device already used by themselves during the last month, as well as the rates of ever using already used injection devices were reported in Kutaisi (n=96, 52.5%; OR=2.01, 95% CI:1.33-3.05), Batumi (n=68, 38.2%), Zugdidi (n=50, 37.3%) and Tbilisi (n=67, 35.4%). The majority of PWID who were using already

used injection devices during the last month always/sometimes cleaned them before reusing, this rate is statistically significantly different across cities: Gori-100% (n=16), Zugdidi-100% (n=51), Batumi-98.6% (n=70), Rustavi-96.6% (n=28), Kutaisi-93.8% (n=90), Telavi-84.2% (n=16) and Tbilisi-80.6% (n=54).

The highest rates of using a shared injecting paraphernalia being in touch with used injecting equipment (by someone else) during the last drug injection were reported in Rustavi (n=128, 47.4%; OR=13.37, 95% CI:8.29-21.55) and Telavi (n=107, 39.6%; OR=9.74, 95% CI:6.03-15.74). The rates of drug solution use that had been prepared without the presence of the study participants range from 7.6% (Zugdidi, n=21) to 31.9% (Rustavi, n=86).

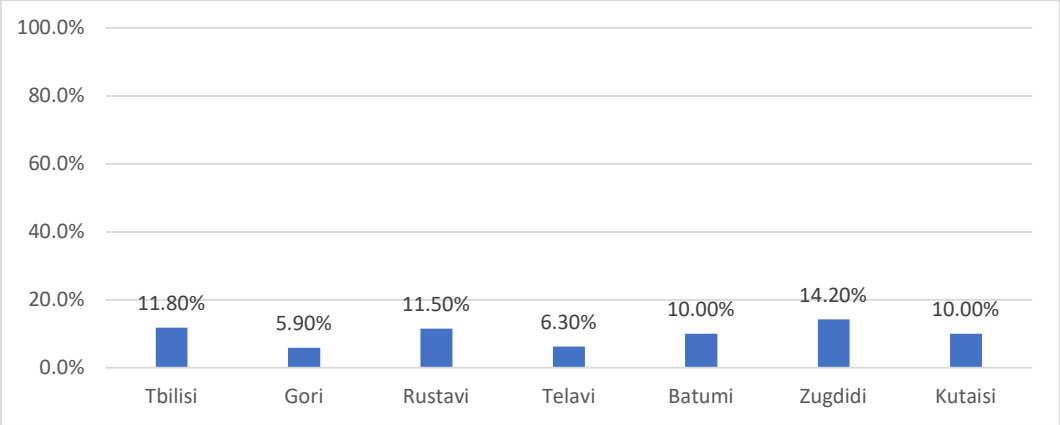
The use of a new, sterile needle/syringe/another injection device

During the last month, the lowest rate of a new, sterile injection device use was reported in Kutaisi (n=249, 92.2%; OR=0.22, 95% CI:0.09-0.53). The majority of study participants buy new, sterile needles/syringes in the pharmacy. This rate across cities ranges between 56.7% (Telavi, n=152; p<0.001) and 96.7% (Rustavi, n=260; p<0.01). The rates of receiving new, sterile needles/syringes from the NSP are statistically significantly different across cities: Telavi-78.4% (n=210), Gori-72.9% (n=196), Batumi-65.9% (n=178), Zugdidi-61.8% (n=170), Kutaisi-54.9% (n=147), Rustavi-43.5% (n=117) and Tbilisi-35.0% (n=133).

Information on drug overdose

The rate of overdose among participants during the last year ranges between 5.9% (Gori, n=16; OR=0.47, 95% CI:0.26-0.85) and 14.2% (Zugdidi, n=39) (Figure C5).

Figure C5. The distribution of injectional drug overdose cases across cities



The percentage of participants, who have witnessed someone experiencing an overdose during the last year is statistically significantly different across cities: Rustavi-43.3%

(n=117), Batumi-28.9% (n=78), Tbilisi-27.9% (n=106), Kutaisi-21.9% (n=59), Zugdidi-19.3% (n=53), Telavi-18.9% (n=51) and Gori-17.4% (n=47).

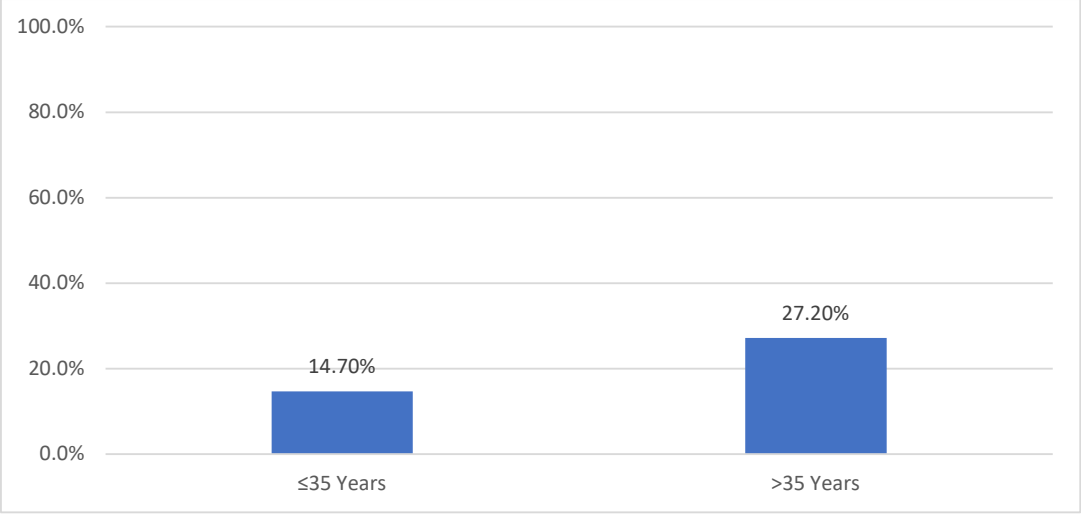
Information on places of drug use across cities

The majority of respondents, in all seven cities (Zugdidi had the lowest rate 71.6% (OR 0.49; p<0.001)), inject drugs at home (Table I3.2). The distribution of participants according to the places of drug use across cities is as follows: as previously mentioned, the practice of drug use at home is the highest in every city, followed by drug use in the automobile (Kutaisi - 22.6% (n=61), Zugdidi and Batumi 18.9% (n=52 and n=51), Gori - 17.8% (n=48), Telavi 13% (n=35) and Rustavi 9.3% (n=25)). The share of respondents, who has drug use experience in non-residential space is 12.5% and is the lowest in Telavi - 5.2% (OR 0.29; p<0.001), and the highest in Batumi - 21.1% (OR 1.43; p=0.08). 20.3% of PWID living in Tbilisi have used drugs wherever it was possible, which is the highest across cities (Table I3.1).

Risk behavior of drug use by age

The rate of use of needle/syringe/another injection device already used by someone else is higher in >35-year-old participants (n=427, 27.2%) compared to participants ≤35 (n=64, 14.7%) (OR=2.17, 95% CI:1.63-2.89) (Figure C6).

Figure C6. The use of injection devices already used by someone else across age groups



A greater portion of >35-year-old participants (n=660, 42.0%) have used an injection device already used by themselves, compared to ≤35-year-old participants (n=148, 34.0%) (OR=1.41, 95% CI:1.13-1.76). Out of those PWID who have ever used already used injection devices, 20.3% (n=35) and 13.7% (n=118) of ≤35 and >35-year-old participants, respectively, used injection device already used by themselves during the last drug

injection (OR=0.62, 95% CI:0.41-0.95). During the last month, out of those PWID who have ever used already used injection devices, a higher rate of used device use was reported in younger participants (n=84, 48.8%), compared to that of >35 (n=259, 30.2%) (p<0.001). During the last month, 29.9% (n=165) and 25.7% (n=403) of ≤35 and >35-year-old participants, respectively, who have ever used already used injection devices, always/sometimes used syringe filled beforehand (meaning the syringe that had already been filled with drugs without their presence) (OR=0.56, 95% CI:0.45-0.70). During the last drug use 23.4% (n=102) of ≤35-year-old participants and 18.7% (n=293) of those >35 used shared injection paraphernalia being in touch with the needle/syringe used by someone else (OR=0.75, 95% CI:0.58-0.97) (Table C3).

The use of a new, sterile needle/syringe/another injection device

The lower rate of new, sterile needle/syringe/another injection device use during the last month was reported in ≤35-year-old participants (n=415, 95.4%), compared to >35-year-old participants (n=1532, 97.6%) (OR=1.94, 95% CI:1.12-3.37). The rate of purchasing new, sterile injection devices in the pharmacy is higher in the ≤35 age group (n=393, 90.6%) compared to that of >35 (n=1321, 84.4%) (p<0.01). The rates of new injecting equipment received from NSP across age groups are as follows: ≤35-year-old PWID: 52.8% (n=229) and >35 PWID: 58.9% (n=922) (OR=1.28, 95% CI:1.04-1.59) (Table C3).

Information on drug overdose

The rate of an overdose during the last year is statistically significantly higher in younger PWID (12.9%, n=56 and 9.3%, n=146, respectively) (OR=0.69, 95% CI:0.50-0.96). The case of PWID witnessing someone experiencing an overdose has the same tendency (30.8% (n=134) of ≤35-year-old PWID and 24.0% (n=377) of >35-year-old PWID (p<0.01)) (Table C3).

Information on places of drug use across age groups

The practice of drug use at home is more common in >35-year-old participants compared to those ≤35. However, no statistically significant association has been found ((p=0.093). The use of drugs in the automobile, in a non-residential space, and wherever it is possible is different according to age. The use of drugs in the above-mentioned places is more common in ≤35-year-old PWID. 15.5% of >35 injects drugs in the automobile (OR 0.61; p<0.001). The same is true for drug use in a non-residential space (18.6% vs 11.8%, respectively) (p=0.017).

Risk behaviour of drug use by alcohol consumption

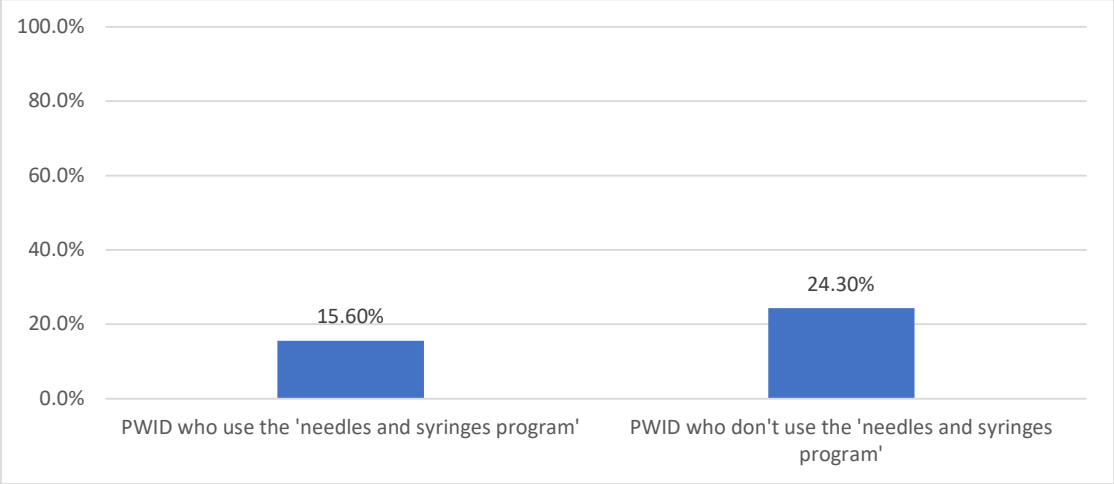
According to study results, those PWID who consume alcohol (n=211, 29.5%) more often use needles/syringes/other injection devices already used by someone else, compared to

PWID (n=280, 21.7%) who rarely/never consume alcohol (OR=1.51, 95% CI:1.22-1.85). During the last month, the rate of reusing needles/syringes/other injection devices already used by themselves is higher in alcohol consumers (n=142, 38.2%), compared to those (n=201, 30.5%) who rarely/never consume alcohol (OR=1.41, 95% CI:1.08-1.84). During the last month alcohol consumer PWID (n=131, 89.1%) less often cleaned already used injection devices, compared to PWID (n=194, 96.0%) who rarely/never consume alcohol (p=0.02). A Bigger portion of alcohol consumer PWID (22.3% vs 18.1%) receive new, sterile needles/syringes from friends. 10.7% (n=76) of alcohol consumer PWID and 4.8% (n=62) of those who rarely/never consume alcohol received new, sterile needles/syringes from another drug user (p<0.001) (Table C4).

Risk behavior of drug use by the use of needles and syringes program

We studied the risk behavior of PWID by the use of NSP. The participants who are beneficiaries of the program was used as a reference group. Several variables showed statistically significant differences of risk behavior. For example, a larger proportion of PWID (n=98, 21.4%), who do not use NSP used injection device already used by themselves during the last drug injection, compared to program beneficiary PWID (n=55, 9.6%; OR=2.58, 95% CI:1.80-3.68). Study participants (n=169, 37.0%) no using NSP more often used injection device already used by themselves during the last year, compared to those participants (n=174, 30.3%) who use the program (OR=1.35, 95% CI:1.04-1.75). During the last episode of drug use, study participants (n=229, 24.3%) who do not use the program more often used shared injecting paraphernalia being in touch with used needle, compared to NSP beneficiaries (n=166, 15.6%; p<0.001) (Figure C7).

Figure C7. The use of shared objects (bottle, spoon, glassware, etc) by the use of the "needles and syringes program"



The majority of study participants (more than 97%), both NSP users and nonusers, during the last month always/sometimes used new, sterile injection devices. No statistically significant difference was found between NSP users and non-users by overdose experience. The rate of overdose during the last year is 10.4% among NSP users and 9.7% among the rest of the participants. During the last year NSP beneficiaries more often witnessed someone experiencing an overdose in Georgia (n=285, 26.8%), compared to the rest of the participants (n=226, 24.0%). More OST beneficiaries use NSP program, compared to the rest of the participants (these differences aren't statistically significant).

A greater portion of people on OST reported using injection devices already used by someone else (33.7% vs 26.4%) or by themselves (52.8% vs 39.6%), compared to NSP users.

Sexual behavior

Definition of sexual partner types

Regular sexual partner – a sexual partner with whom the sexual relationship lasts for more than one year or lasts for less than one year, but there is an intention to continue the relationship.

Casual sexual partner – a sexual partner who is not a regular partner and with whom a sexual relationship is established without financial compensation.

Paid sexual partner - a sexual partner with whom a sexual relationship is established in exchange for material remuneration (pays the partner or receives remuneration from the partner).

History of sex life

Most of the respondents (n=1518, 75.7%) had their first sexual intercourse before the age of 18. The average and median age of sexual intercourse is 16 years (minimum age 13 years, maximum age 33 years). 84.7% (n=1650) of the surveyed individuals reported having sex with a partner of the opposite sex in the past 12 months, of which 15.5% (n=225) had two and 30.6% (n=505) had more than two sexual partners. 71% of the respondents (n=1174) had only one regular sexual partner during the last year (Table D1). More than 10% of the study subjects (n=172) had sex with one or more paid sexual partners during the last 1 year. When asked who the last sexual partner was, 77.8% (n=1287) of respondents named regular, 13.2% (n=217) casual, and 6.3% (n=104) paid sex partner (Table D1).

Only 31.4% of the study subjects (n=629) used a condom during the last sexual intercourse (Table D1).

More than half of the interviewed PWID (n=959, 58.3%) indicated that only themselves, in the case of 0.9% (n=15) - only their sexual partner, and in 2.9% (n=48) - both (themselves and their sexual partner) were under the influence of drugs during the last sexual contact (Table D1).

1.3% (n=25) of the study subjects ever had sex with a same-sex partner, and among them 32% (n=8) reported that they had this relationship in the last 12 months. Only 36% of respondents (n=9) used a condom during the last homosexual intercourse (Table D1).

Most of the respondents who ever had homosexual contact (n=16, 64%) did not answer the question whether they had homosexual intercourse in exchange for drugs (Table D1).

6.5% (n=131) of the study participant PWID reported having anal sex with any sexual partner in the past 12 months, and only 46.6% (n=61) of them used a condom during the last anal sex (Table D1).

The majority of the study subjects (n=1560, 77.8%) did not have any problems with obtaining condoms (Table D1).

Sexual behavior with different types of sexual partners

Regular sexual partner

The majority of the surveyed PWID (n=1439, 74.1%) had a regular sexual partner in the past 12 months (Table E1).

More than half of the respondents (n=824, 57.3%) had sexual contact with a regular partner 1-10 times, and 12.8% (n=184) more than 10 times in the last 1 month. Only 29.3% (n=422) of the interviewed PWID used a condom during the last sexual contact with a regular sexual partner (Table E1).

Condom use during the last sexual intercourse was in most cases (n=293, 69.6%) the result of a shared decision with the partner. Among the reasons for refusing to use a condom with a regular sexual partner, almost two-thirds (n=606, 62.2%) stated that they did not consider it necessary, and in 20.4% (n=199) of cases the reason was refusal from the partner. In the past year, 38.6% (n=555) of the respondents had never used a condom with a regular sexual partner, while 12.8% (n=184) always and 11.5% (n=165) almost always used a condom during this period (Table E1).

A small proportion of the surveyed PWID (n=51, 3.5%) reported that their regular sexual partner uses injection drugs (Table E1).

Casual sexual partner

25.8% (n=498) of the interviewed PWID claimed to have had sex with a casual sexual partner in the last 1 year among whom 36.1% (n=180) had sex once, and 34.9% (n=147) had sex more than once in the last 1 month (Table E1).

During the last sexual contact with a casual sexual partner, 71.9% (n=358) of study participant PWID used a condom. Condom use in 48.6% (n=174) of cases was the decision of the respondent only, and in 44.1% (n=158) was the shared decision with the partner. Among the reasons for not using a condom, the most frequently mentioned was "I don't like to use condoms" - 31.9% (n=38), followed by "it was not available/I didn't have it" - 25.2% (n=30) and "I didn't think it was necessary" - 24.4% (n=29). During the last 1 year, 8.8% of respondents (n=44) never used a condom with a casual sexual partner. The rate of "always using" condoms with a casual sexual partner in the last 12 months was low and was only 46.4% (n=231) (Table E1).

Significant proportion of the interviewed PWID (42.6%, n=212) did not know whether their casual sexual partner used injection drugs. Only 6.2% (n=31) of the respondents reported that their casual sex partner is an injecting drug user (Table E1).

Paid sexual partner

During the last 12 months, 12.3% (n=238) of the study participant PWID had a paid sexual partner, which is a lower rate compared to 2017 survey (20.4%) (Figure E7). Among those who had a paid sex partner, 34.7% (n=75, 34.7%) once, 19.4% (n=42) twice, and 12.5% (n=27) more than twice had sexual intercourse with the last paid sexual partner in the past 1 month (Table E1). Among those who had paid sex in the past 1 year, nearly 15% (n=34) reported having one or more paid sex partners in the past 1 month with whom they had sex to receive money or drugs. Significantly higher was the proportion of the study participants who had one (n=99, 41.8%) or more than one (n=80, 33.8%) paid sex partner to whom they gave money or drugs in exchange for sex in the past 1 month (Table E1).

88.7% of respondents (n=211) used a condom during the last intercourse with a paid sexual partner. Condom use during the last paid sexual intercourse was in 46.4% (n=98) the result of a shared decision with the partner, in 32.2% (n=68) - only the respondent's decision, and in 13.7% (n=29) - only the partner's decision. 8.8% (n=21) of the surveyed PWID stated that they did not use a condom during the last paid sex.

The reasons for refusing to use condoms were distributed as follows: 42.9% (n=9) of the respondents did not consider necessary to use condoms, 23.8% (n=5) did not like to use condoms, and 19% (n=4) did not think about using condom. Only 58.8% (n=140) of the

surveyed PWID always used condoms with a paid sexual partner in the last 1 year (Table E1).

Almost half of the respondents (n=112, 47.1%) were not informed about injection drug use practice by paid sex partners. Injection drug use by paid sex partners was confirmed by 12.2% of the study subjects (n=29) (Table E1).

Casual and paid sexual partners in married PWID

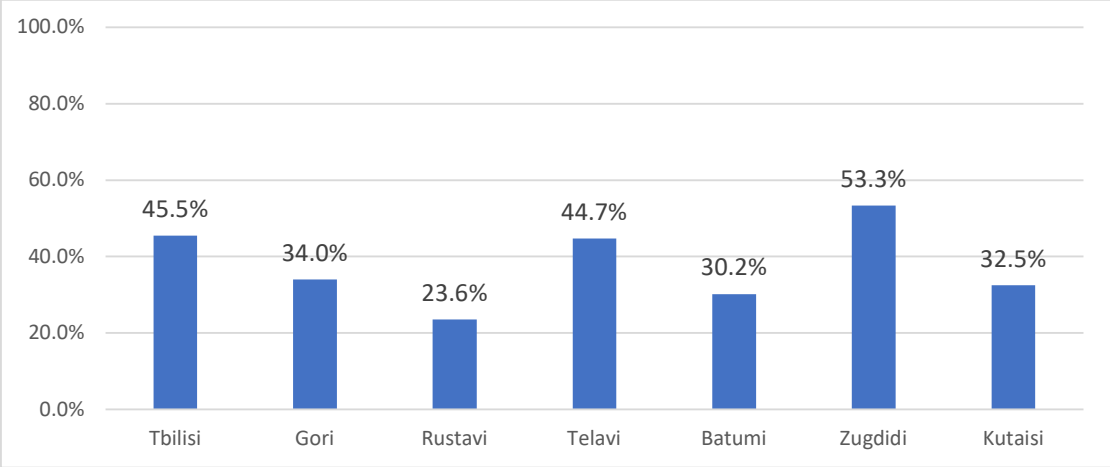
Among married PWID 18.7% (n=177) had a casual sex partner and 5.7% (n=54) had a paid sex partner in the past 12 months (Table E1).

Sexual life history and condom use by different characteristics

The lowest frequency of sexual contact with a partner of the opposite sex among the surveyed PWID in the last 12 months was observed in Gori (n=158, 73.1%; OR=0.3; 95% CI:0.2-0.5; p<0.001) and Zugdidi (n= 225, 81.8%; OR=0.6; 95% CI:0.4-0.9, p=0.02) (Table E2). This indicator was also lower in the respondents over 35 years (n=1235, 81.0%) compared to the younger ones (≤35 years) (n= 415, 97.6%) (OR=0.1; 95% CI:0.5-0.2; p<0.001) (Table E3).

The frequency of condom use during the last sexual contact was the lowest in Rustavi (n=53, 23.6%) (OR=0.3; 95% CI:0.2-0.5; p<0.001) and the highest in Zugdidi (n=120, 53.3%; OR= 1.3; 95% CI:0.9-1.9; p=0.07) (Table E2, Figure D1.1). This indicator was statistically significantly associated with the age of the respondent, namely, 35.5% of PWID ≤35 years old, and 47.3% of PWID >35 years old reported that they used a condom during the last sexual contact (OR=0.6; 95% CI:0.5-0.7; p<0.001) (Table E3). Also, a higher proportion of the study participants who had used preventive programs in the past 1 year reported using a condom during their last sexual intercourse than those who had not (43.4% vs 31.6; OR=1.6; 95% CI:1.3-2.0; p <0.001) (Table E5). The rate of condom use at the last sexual intercourse did not differ by the level of education, frequency of drug and alcohol use in the last 1 month (Tables E6 and E7).

Figure D1.1. Used condom during the last sexual intercourse



In Batumi, 7% of interviewed PWID have ever had sexual intercourse with same-sex partner, and this proportion was significantly higher compared to other cities (n=19; OR=14.7; 95% CI:3.4-63.9; p<0.001) (Table E2). Only 42% of surveyed PWID in Batumi who ever had sexual intercourse with a same-sex partner reported that they used condom during the last homosexual contact. The probability of homosexual contact did not differ by age groups (Table E3).

The frequency of anal sex with any sexual partner in the last 12 months was highest in Batumi (n=76, 28.2%; OR=14.4; 95% CI:7.3-28.6; p<0.001) (Table E2). This indicator was three times higher in PWID aged ≤35 years compared to those ≥35 years old (12.9% vs 4.8%; OR=0.3; 95% CI:0.2-0.4; p<0.001) (Table E3). The likelihood of anal sex in the past 1 year was also relatively higher among PWID who used drugs more often (7.4% vs 5.2%, OR=1.4; 95% CI:0.9-2.1; p=0.05) (Table E6). The practice of anal sex was not statistically significantly associated with the level of education and the frequency of alcohol consumption in the last 1 month (Tables E4 and E7).

The frequency of condom use during anal sex varied by city from 39.5% (Batumi) to 66.7% (Kutaisi) (Table E2). The probability of using a condom during anal sex was higher in ≤ 35 years age group, although this association was not statistically significant (53.6% vs 41.3%, OR=0.6: 95% CI:0.3-1.2; p=0.1) (E2). The study revealed that the use of preventive programs significantly increased the likelihood of condom use during anal intercourse among PWID. In particular, the frequency of condom use during last anal sex was twice as high among those who had benefited from preventive programs in the last 1 year, compared to those who did not (64.2% vs 31.6; OR=3.8; 95% CI:1.6-9.0; p=0.001) (Table E5). Condom use during anal sex was also statistically significantly associated with the frequency of drug use during the past 1 month. Specifically, PWID who used drugs more frequently (≥1 times per week) were more likely to use a condom during anal intercourse compared to PWID who used drugs rarely (once or several times per month)

(54.4 vs 30.8%, OR=2.6; 95% CI:1.2-5.9; p=0.01). (Table E6). The frequency of condom use during anal sex was not related to the level of education and the frequency of alcohol consumption (Tables E4 and E7).

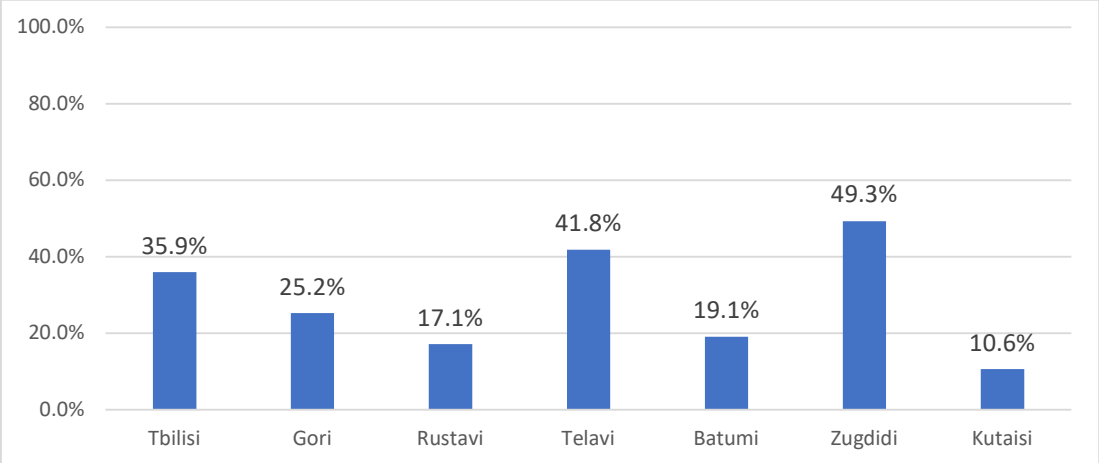
In relation to obtaining condoms, any type of problem was more common among young PWID compared to older ones (3.0% vs 1.6%; OR= 0.5; 95% CI:0.2-1.0; p=0.05) (Table E2). According to cities, the highest frequency of having any kind of problem in obtaining condoms were reported among the study participants from Rustavi (4.1%; OR=4.0; 95% CI:1.2-12.6) (Table E2).

Sexual behavior with regular sexual partner by different characteristics

The lowest frequency of sexual contact with a regular sexual partner during the last 12 months was found in Kutaisi (n=170, 63.2%; OR=0.5; 95% CI:0.4-0.8, p<0.001) and Gori (n=143, 66.5%; OR= 0.5; 95% CI:0.3-0.8; p=0.002). In other cities, there was no significant difference between these indicators (Table E2). Statistically not significant difference was also found in this indicator among age groups (Table E3).

The rate of condom use during the last sexual contact with a regular sexual partner was the lowest in Kutaisi (n=18, 10.6%; OR=0.2; 95% CI:0.1-0.3; p<0.001) and the highest in Zugdidi (n=101, 49.3%; OR=1.7; 95% CI:1.2-2.4; p=0.003) (Figure D1.2). The frequency of condom use during the last sex with a regular partner among PWID was also quite low in Rustavi (n=36, 17.1%; OR=0.3; 95% CI:0.2-0.5; p<0.001) and Batumi (n=41, 19.1%; OR=0.4; 95% CI:0.2-0.6; p<0.001) (Table E2). The probability of using a condom during last sexual intercourse with a regular sex partner was not statistically significantly different by age group (Table E3).

Figure D1.2. Used condom during the last sexual intercourse with regular sexual partner



When asked how often they used condoms with a regular sexual partner in the last 1 year, the largest proportion of the interviewed PWID in Gori said that they had never

used condom with a regular sexual partner during this period (n=77, 53.8%, OR=1.8; 95% CI:1.2-2.7; p=0.004). This indicator was the lowest in Batumi (n=41, 19.1%; OR=0.4; 95% CI:0.2-0.6; p<0.001) (Table E2). There was a statistically significant difference in the frequency of condom "never use" in different age groups, in particular, larger proportion of PWID over 35 years of age had never used condom in the last 12 months compared to those under 35 years (41.0% vs 30.5%; OR=1.5; 95% CI:1.2-2.0; p<0.001) (Table E3).

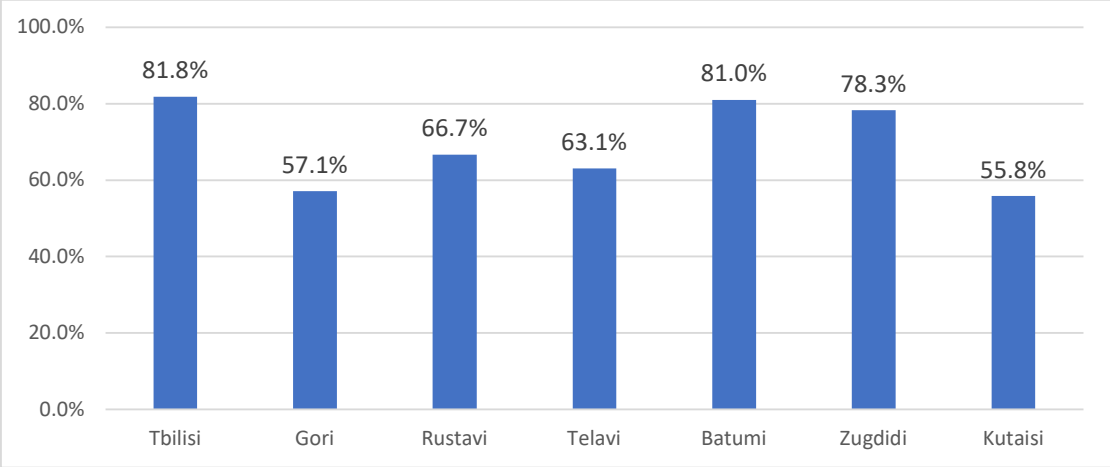
A regular partner who injected drugs had the highest proportion of PWID interviewed in Telavi (n=12, 6%; OR=2.6; 95% CI:1.0-6.8; p=0.04) (Table E2). This indicator was statistically significantly different by groups (Table E3).

Sexual behavior with casual sexual partner by different characteristics

During the last 12 months, the highest frequency of sexual contact with a casual sexual partner was found in Batumi (n=105, 39%; OR=1.5; 95% CI:1.0-2.0; p=0.01), and the lowest in Gori (n=21, 9.9%; OR=0.2; 95% CI:0.1-0.4; p<0.001) (Table E2). Younger age was found to significantly increase the likelihood of casual intercourse among PWID. In particular, more than twice as many younger (≤35 years) PWID reported having a casual sexual partner in the past year compared to those older than 35 years (45.0% vs 20.4%; OR=0.3; 95% CI:0.2-0.3; p<0.001) and this difference was statistically significant (Table E3). Among PWID, having casual sex in the past 12 months was not associated with education level, frequency of drug and alcohol use in the past 1 month (Tables E4, E6 and E7).

The frequency of condom use during the last casual sex differed significantly by cities, in particular, it was the lowest in Kutaisi (n=48, 55.8; OR=0.3; 95% CI:0.1-0.5; p<0.001) and Gori (n=12, 57.1%; OR=0.2; 95% CI:0.1-0.7; p=0.01), where less than two-thirds of the respondents confirmed condom use during the last casual sexual intercourse. This indicator was the highest in Tbilisi (81.8%) and Batumi (81.0%) (Table E2, Figure D1.3). The likelihood of using condom with casual sexual partner was statistically significantly associated with alcohol consumption and use of preventive programs. In particular, PWID who consumed alcohol frequently (once or more times a week) in the past 1 month were less likely to use condoms during casual intercourse than those who never or rarely consumed alcohol (66.1% vs 79.8%, OR=0.5; 95% CI:0.3-0.7; p<0.001) (Table E7). A greater proportion of the respondents used condom during last sex with casual sexual partner who had used preventive programs in the last 1 year than those who had not used these programs (81.8% vs 72.7%; OR=1.6; 95% CI:1.1-1.7; p=0.04) (Table E5). The frequency of condom use during last casual sex did not differ by age group, education level, and frequency of drug use in the last 1 month (Tables E3, E4, E6).

Figure D1.3. Used condom during the last sexual intercourse with casual sexual partner



The probability of "never using" condoms with casual sexual partners in the past 1 year was three times higher among the respondents aged 35 years and older compared to younger ones (11.7% vs 4.2%, OR=3.0; CI: 1.3-6.6; p=0.004) (Table E3). Among the cities, this indicator was the highest in Gori (n=6, 28.6%, OR=3.2; 95% CI:1.0-10.0; p=0.04) and the lowest in Kutaisi (n=1, 1.2%; OR=0.1; 95% CI:0.01-0.7; p=0.02) (Table E2). The frequencies of "never using" condoms in the past 12 months with casual sexual partners did not differ by level of education and frequency of drug use in the past 1 month (Tables E4 and E6). A higher proportion of PWID (10.9%) who consumed alcohol frequently (once a week or more) stated that they had never used condoms with casual sexual partners in the past 1 year, compared to those never or rarely consumed alcohol in the past 1 month (7.7%). However, the above-mentioned difference was not statistically significant (Table E7). The study subjects who did not use preventive programs had higher probability of "never using" condoms than those who used such programs in the past 1 year, but this association was also statistically not significant (Table E5).

The highest probability of casual sex with an injecting drug user sexual partner was observed in Rustavi (n=10, 23.8%; OR= 4.5; 95% CI:1.6-13.0; p<0.001), which was significantly higher than the indicators of other cities (Table E2). Injection drug use by casual sexual partner was not associated with the age of PWID (Table 3).

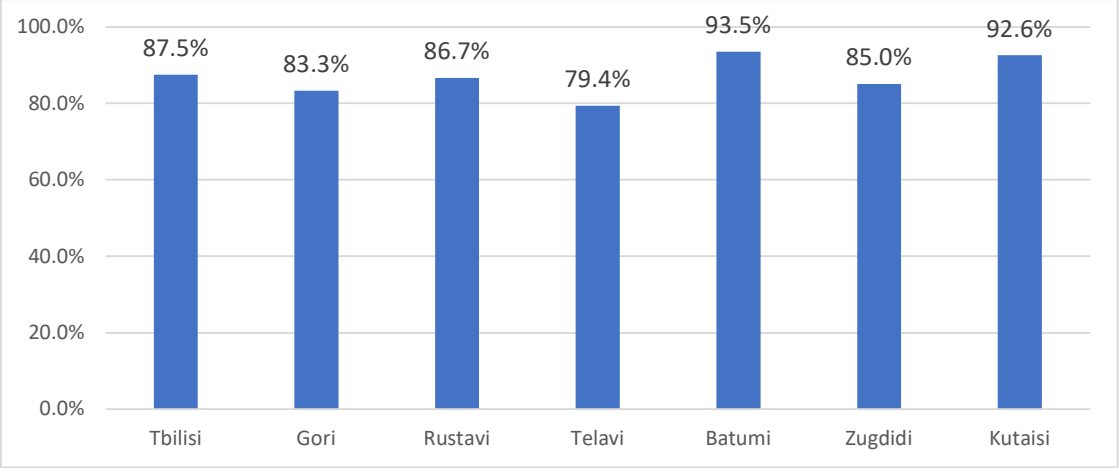
Sexual behavior with paid sexual partner by different characteristics

A significantly higher proportion of the respondents in Kutaisi had sexual contact with a paid sexual partner in the last 12 months compared to other cities (n=94, 34.9%; OR=5.8; 95%CI: 3.7-9.0; p<0.001) (Table E2). Probability of paid sex was higher among young PWID, namely, 25.2% of the respondents ≤35 years of age reported having had paid sex within 1 year, while this sexual behavior was observed in only 8.7% of PWID over 35 years of age (OR=0.3; 95%CI: 0.2-0.3; p<0.001) (Table E3). A paid sex partner also had the greater proportion of PWID who used drugs once or more per week (13.9 vs 8.9%;

OR=1.5; 95%CI: 1.1-2.1; p=0.0004) (Table E6). In addition, the likelihood of paid sex was associated with the frequency of alcohol consumption. In particular, the study participants who consumed alcohol once a week or more were more likely to report having a paid sexual partner compared to those who never or rarely consumed alcohol in the past 1 month (17.1% vs 7.7%; OR=1.4; 95%CI: 1.4 -2.5; p<0.001) (Table E7). Having paid sex in the last 1 year was not statistically significantly associated with the level of education of PWID (Table E4).

The frequency of condom use during the last intercourse with a paid sexual partner did not differ significantly by cities and varied between 83.3% and 93.5% (Table E2, Figure D1.4). Higher frequency of condom use during the last paid sex was observed among young (≤35 years old) PWID compared to those >35 years old (94.4% vs 84.0%; OR=0.3; 95%CI: 0.1-0.8; p=0.01) (Table E3). Statistically significant association was not found between the probability of using condom during the last sexual contact with a paid sex partner and the level of education, frequency of drug and alcohol use, and use of preventive programs (Tables E4, E5, E6 and E7).

Figure D1.4. Used condom during the last sexual intercourse with paid sexual partner



The probability of "never using" condoms with paid sexual partners in the last 12 months was highest in Rustavi (13.3%, OR=1.4; 95%CI: 0.2-10.0; p=0.7), although this difference was not statistically significant (Table E2). The probability was also different by age groups, but statistically not significant (1.9% of PWID <35 years old and 6.1% of PWID >35 years old had never used condoms during paid sex in the last 1 year) (Table E3). The likelihood of "never using" condoms with paid sex partners was not statistically significantly associated with the level of education, use of preventive programs, and frequency of drug and alcohol use (Tables E4, E5, E6, and E7).

The highest frequency of injection drug use by paid sex partner was observed in Tbilisi (15.6%) and Zugdidi (15.0%) (Table E2). The likelihood of having paid sex with an injecting drug user partner was not associated with the age of PWID (Table E3).

Multivariate analysis

Using condom during the last casual sexual intercourse

Multivariate analysis was performed to identify independent predictors of condom use during last casual sexual intercourse. As a result, alcohol consumption and using preventive programs in the past 12 months were statistically significantly associated with condom use at casual sex and therefore represent independent risk factors. (Table E8).

Table E8. Condom use during last casual sexual intercourse, multivariate analysis

Characteristics	Condom use during last casual sex				*P*	aOR; 95% CI
	Used		Didn't use			
Alcohol consumption during the last month						
Never/Rarely	249	79.8	60	20.2	0.029	1.77 (1.06-2.96)
≥ Once a week	109	66.1	56	33.9		
Use of preventive programs during the last 12 months						
Used	184	81.8	41	18.2	0.04	1.63 (1.26-2.75)
Didn't use	104	72.7	39	27.3		

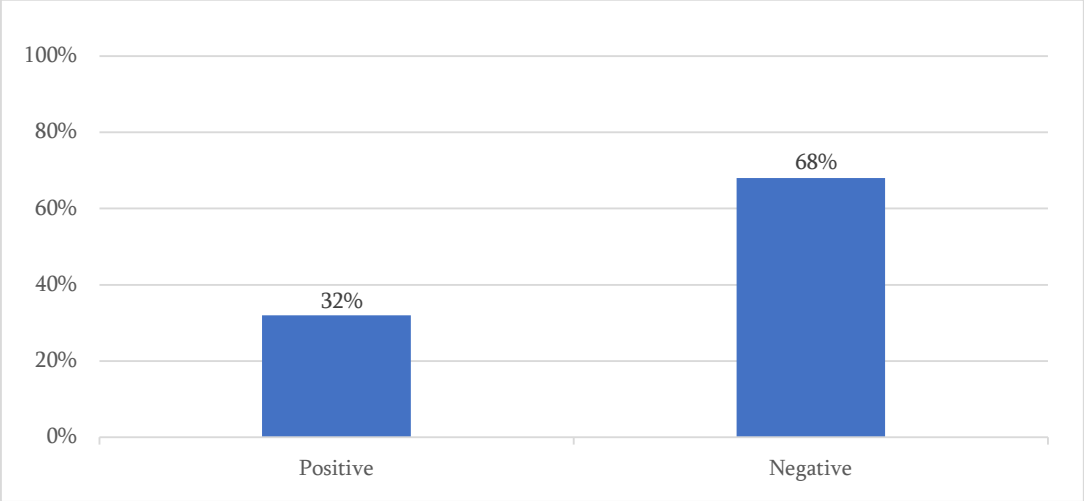
Prevalence of HIV, HCV and HBV infections

Blood sample was collected for HBV, HCV and HIV testing. The prevalence of HIV infection among study participants was 0.9%. All of the HIV positive study subjects were males in ≥25 years old age group (Table 1.1.1-A).

More than half of respondents (58.1%, n=1164) were HCV seropositive. Zugdidi had highest prevalence of HCV (76.7%, n=211) followed by Gori, Batumi, Tbilisi, Telavi, Rustavi, and Kutaisi with proportion of anti-HCV positive 66.7% (n=180), 58.1% (n=157), 55.5% (n=211), 52.2% (n=141), 51.5% (n=139) and 46.3% (n=125), respectively (Table 1.1.1).

873 anti-HCV positive PWID had HCV RNA testing, with positivity rate of 32.1% (n=280) (Figure F1.1). Chronic HCV prevalence is highest in Zugdidi (43.5%, n=74), followed by Batumi (38.1%, n=37), Rustavi (33.3%, n=42), Gori (30.0%, n=33), Tbilisi (28.6%, n=56), Kutaisi (24.4%, n=11) and Telavi (20.9%, n=27).

Figure F1.1 HCV RNA test results

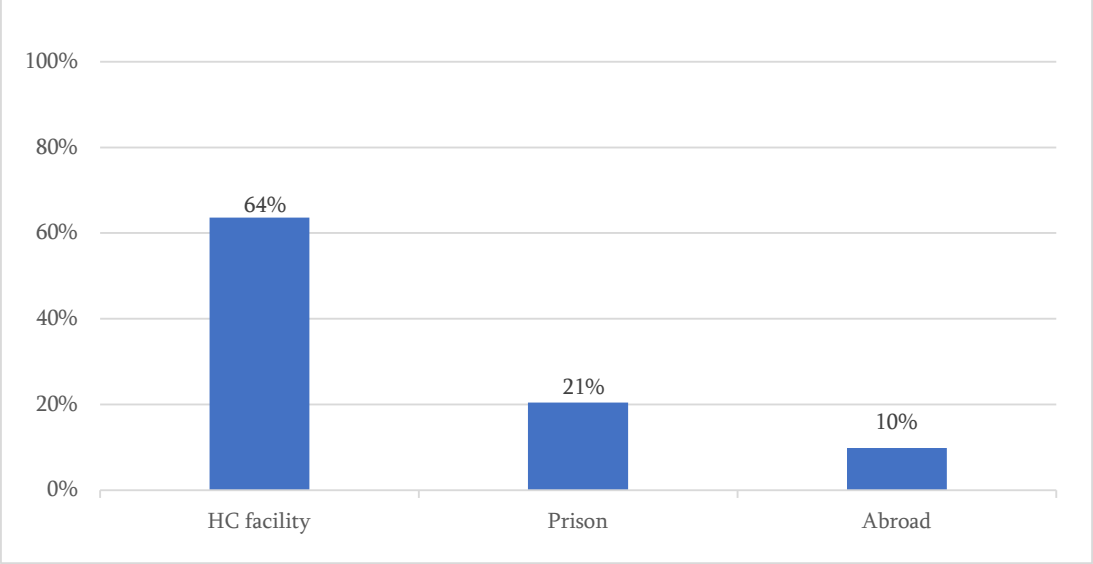


One-third of respondents have HCV treatment history. Among those 13% (n=60) were HCV RNA positive, which most likely indicates reinfection.

The screening for hepatitis B (HBV) was also conducted. HBV surface antigen (HBsAg) was detected in 2.5% (n=51) of respondents. HBsAg prevalence among cities is as follows: Zugdidi (4.8%, n=13), Rustavi (3.3%, n=9), Gori (3.3%, n=9), Telavi (2.2%, n=6), Tbilisi (2.1%, n=8), Batumi (1.5%, n=4), Kutaisi (0.7%, n=2).

Only 7.5% (n=151) of interviewees reported having received HBV vaccine, out of which 63.6% (n=96) were vaccinated at health care facility, 20.5% (n=31) at prison and 9.9% (n=15) – abroad (Figure 1.2). Only 27.8% (n=392) of nonvaccinated individuals expressed willingness to be vaccinated against HBV (table 1.1.2).

Figure F1.2 HBV vaccination place



0.9% (n=19) of study participants are HIV positive. Zugdidi has the highest prevalence (2.5%, n=7), followed by Gori (1.5%, n=4), Batumi (1.1%, n=3), Telavi (0.7%, n=2), Tbilisi (0.5%, n=2) and Rustavi (0.4%, n=1). No HIV case was detected in Kutaisi.

The coinfection prevalence was also evaluated. 16 PWID (n=0.8%) were HCV/HIV coinfected, 38 (1.9%) were HCV/HBV coinfected and 2 (0.09) were HBV/HIV coinfected (table 1.1.1).

Knowledge and Attitude towards Hepatitis C

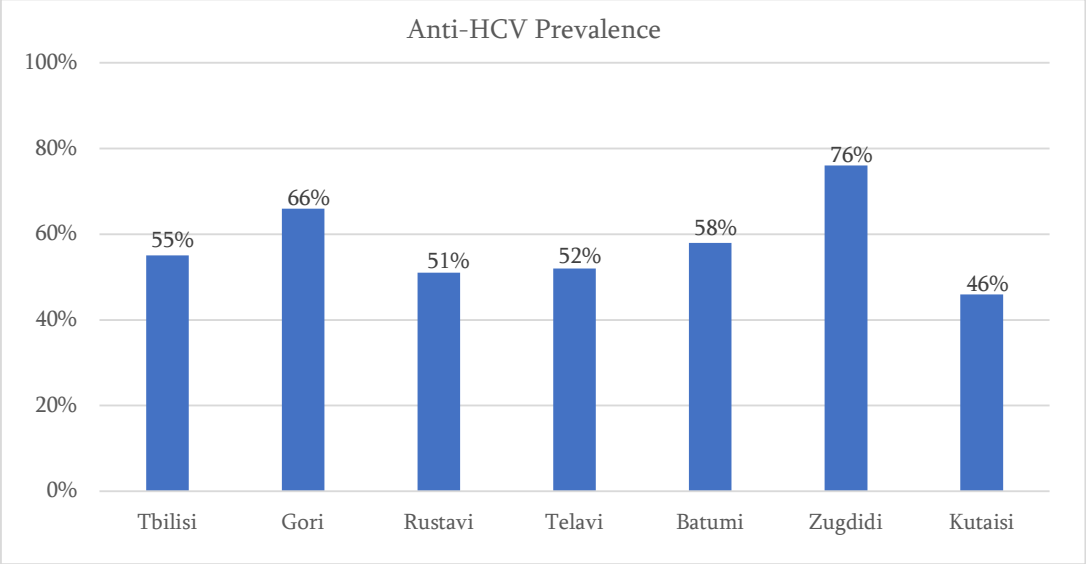
The study evaluated the knowledge and attitude toward hepatitis C. One-tenth of participants (11.2%, n=225) haven't heard about the hepatitis C elimination program. To the question 'Do you know where can you apply to take a hepatitis C test' 88.6% (n=1777) answered 'yes'. More than half of respondents (56.6%, n=1135) have taken a hepatitis C test during the last 2 years. 56.9% (n=1045) of PWID have never taken medications for hepatitis C treatment. 4.2% (n=33) of PWID ceased treatment before ending. The main reason for treatment cessation has been the side effect (42.4%, n=14). 50.1% (n=1004) prefer to receive hepatitis C services (testing, confirmation, treatment) at the hepatitis C treatment medical facility in their city, and 51.4% (n=1031) prefer to receive the services in harm reduction center in their city. (table 1.1.3).

The majority (98.0%, n=1744) know that hepatitis C can be treated in Georgia for free. 11% (n=11) of participants who haven't taken SVR test say that they didn't think it was necessary, and 6% (n=6) say that doctor didn't tell them about it. 42.9% (n=340) of PWID with hepatitis C treatment experience were injecting drugs during the treatment period, 86.8% (n=688) resume/continue to inject drugs after ending/ceasing the treatment, and 9.2% (n=7) had a repeat treatment (Table 1.1.4).

HCV seroprevalence by demographic and behavioral characteristics

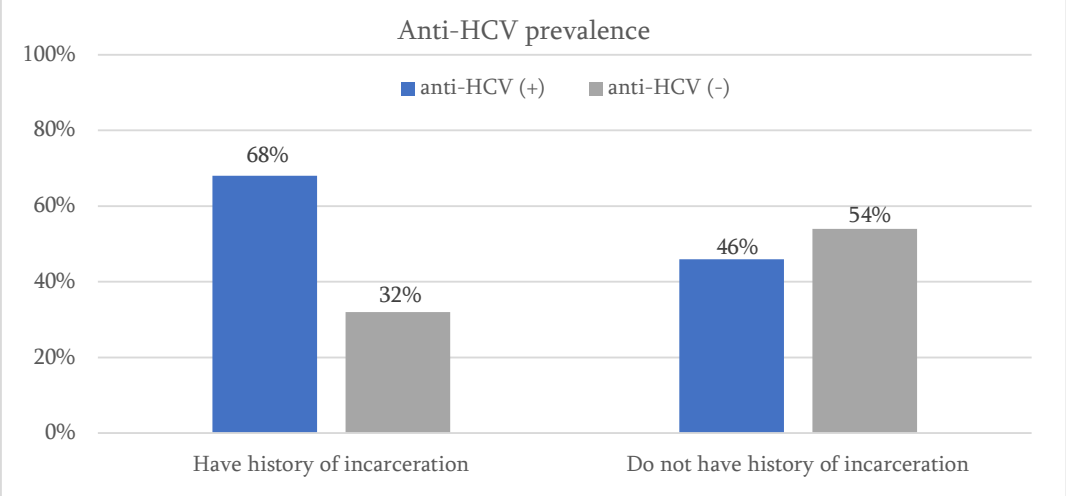
HCV seroprevalence was higher among male (58.4% vs 35.7%; $p<0.05$) and older (>35) (68.4% vs 20.7%; $p<0.001$) PWID. Anti-HCV prevalence was significantly different by cities and was highest in Zugdidi (76%) (Figure F1.3.) PWID who were injecting drugs alone during the last 6 months had higher HCV seroprevalence compared to those who used drugs with the regular users or with various users (65.4%, 57.8% and 50.7%, respectively) and this difference was statistically significant. Daily injection of opioids during the last 12 months was associated with high anti-HCV prevalence (OR=1.72; 95% CI:1.43-2.07). HCV seropositivity was higher among those having used needle/syringe previously used by themselves (OR=1.36; 95% CI:1.13-1.64). Survey revealed that anti-HCV (+) is more prevalent among respondents who didn't have sex with opposite sex partner (72.6% vs 55.5%; $p<0.001$) as well as among PWID who didn't have sex with paid sexual partner during the last 12 months (56.9% vs 42.7%; $p<0.001$).

Figure F1.3. Anti-HCV prevalence by cities



HCV seropositivity was 1.4 times higher among PWID having experience of using needles/syringes pre-used by others (75.9% vs 52.3%; OR=2.87; 95% CI:2.28-3.61). Anti-HCV (+) was more prevalent among the survey participators who had received drug use related treatment (70.4% vs 50.7%; OR=2.30; 95% CI:1.90-2.79). History of incarceration was associated with anti-HCV seropositivity (Figure F1.4). HCV antibodies were found among 85.3% (n=198) of PWID who had injected drugs in prison versus 66.2% (n=229) of those who didn't use (OR=2.97; 95% CI:1.94-4.55).

Figure F1.4. Association of incarceration with anti-HCV prevalence



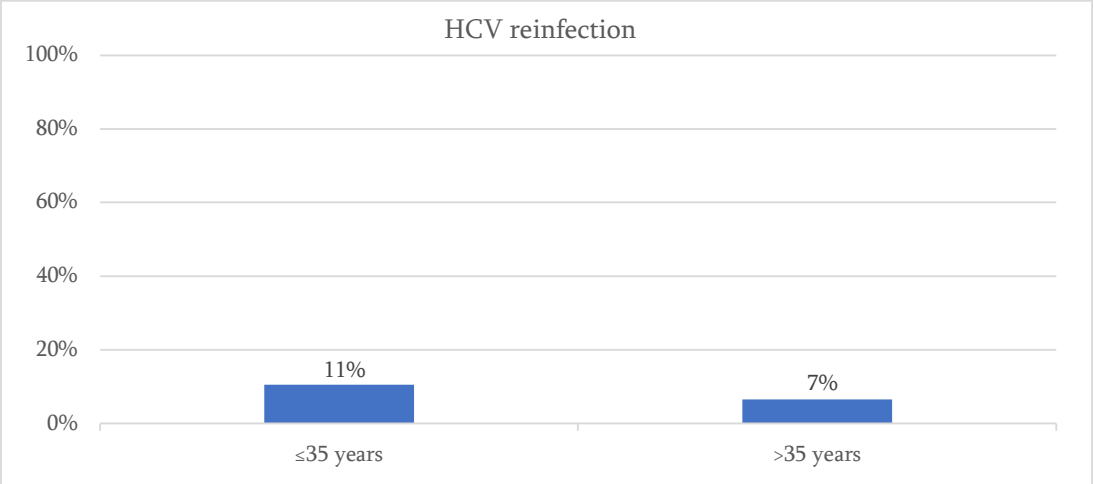
Taking methadone/Suboxone substitution therapy (75.7% vs 68.1%; p=0.15) or receiving syringes from needles/syringes program (58.9% vs 57.3%; p=0.46) were not associated

with HCV seroprevalence. Prevalence of anti-HCV was higher among PWID who didn't use condoms during casual sexual intercourse but this difference was not statistically significant. Individuals who had sex with the same sex partner during the last 12 months were more likely to have HCV antibodies (64.0% vs 57.9%; p=0.68) (table 1.2.1).

Characteristics associated with HCV reinfection

HCV reinfection was higher among ≤35 years old interviewees (10.8% vs 6.5%; p=0.15) (Figure F1.5). HCV reinfection rate was higher among PWID who injected drugs alone compared to those injecting drugs with regular users or with various users (8.3%, 7.3% and 4.4%, respectively) but this difference was not statistically significant. Respondents injecting drugs every day during the last 1 year were more likely to be reinfected (8.5% vs 5.4%; p=0.08). HCV reinfection was relatively high among the study subjects who had ever used needles/syringes pre-used by other users (table 1.2.2).

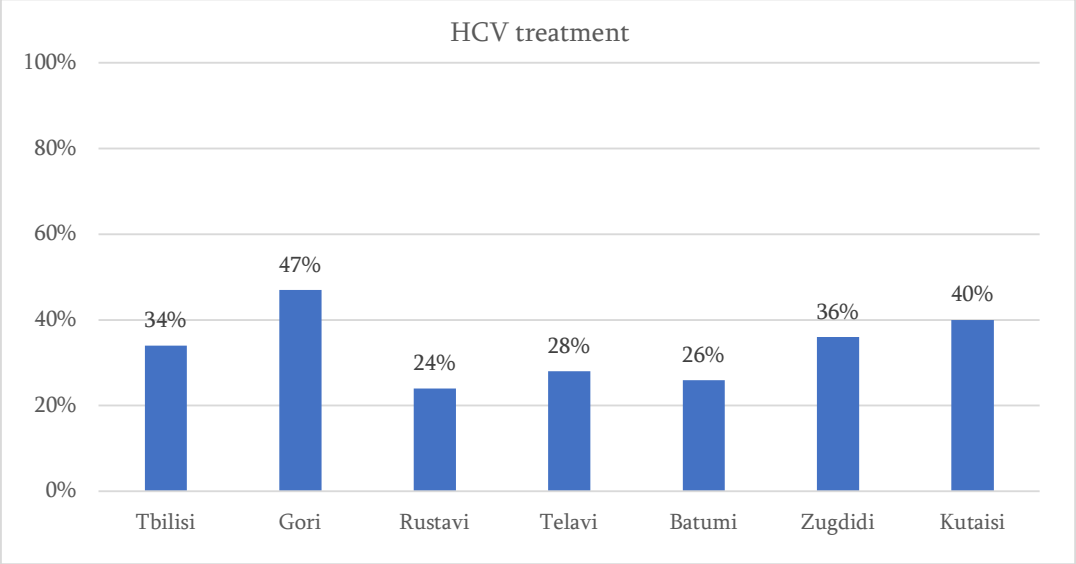
Figure F1.5. HCV Reinfection by age



HCV treatment associated characteristics

Hepatitis C treatment rate was higher among >35 years old respondents (40.7% vs 9.4%; (p<0.001). HCV treatment history was evaluated by cities (Figure F1.6). Statistically significant difference of treatment history was found by cities.

Figure F1.6 HCV treatment rate by cities

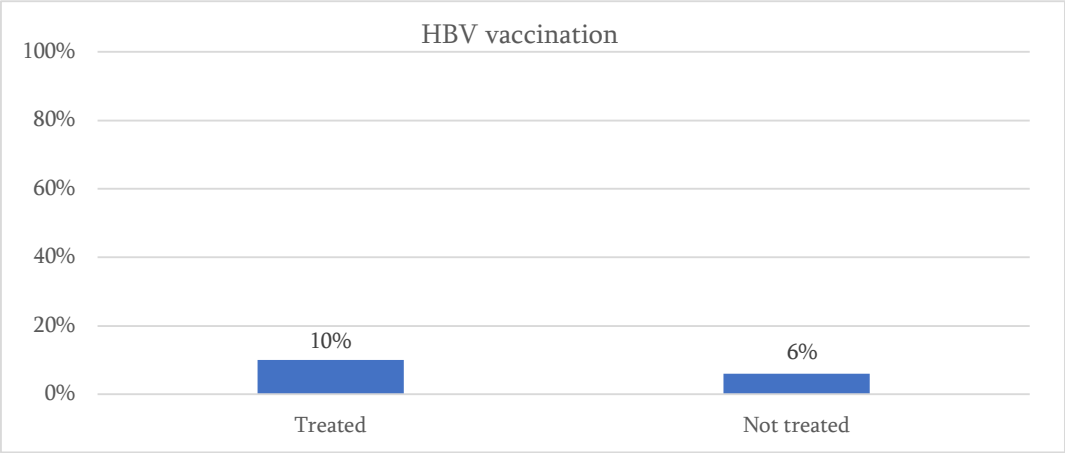


19.4% (149) of those who reported to have taken HCV antiviral medications were not actually treated.

Study revealed that incarceration increases chance of receiving HCV treatment two times (42.5% vs 24.6%; OR=0.44; 95% CI:0.36-0.53). Among those having >1 history of incarceration, HCV treatment rate was higher compared to those having only 1 incarceration history (45.8% vs 37.0%; OR=1.44; 95% CI:1.11-1.86). Spending >1 year in prison during the last episode was associated with HCV treatment (48.5% vs 38.8%; p<0.01). Receiving clean syringes from syringes program during last 30 days unlike using OST services was associated with high rate of HCV treatment (37.4% vs 29.9%; OR=0.71; 95% CI:0.52-0.86). Accordingly, supposedly, HCV treatment program is more actual within HR centers than OST centers. This might partially be caused by the fact that a number of HR centers are HCV treatment providers highlighting the need of integrating treatment program within OST centers.

Statistically significant association was observed between HCV treatment and HBV vaccination (Figure F1.7). 10.6% (n=72) of vaccinated PWID versus 6.0% (n=79) of unvaccinated (or not aware of their vaccination status) indicated to be treated on HCV (OR=0.53; 95% CI:0.38-0.74) (Table 1.2.3).

Figure F1.7 Association between HBV vaccination and HCV treatment



Multivariate analysis

HCV prevalence

Independent predictors of anti-HCV prevalence were age, city, daily use of opioids during the last 12 months, usage of pre-used needles/syringes, receiving drug use related special treatment and using drugs during incarceration by multivariate analysis (table 1.2.5).

HCV treatment

Age (>35) and number of incarcerations (>1) found to be independent predictors of higher HCV treatment rate by multivariate analysis (table 1.2.6).

Knowledge and Attitude towards HIV/AIDS and self-reported risks

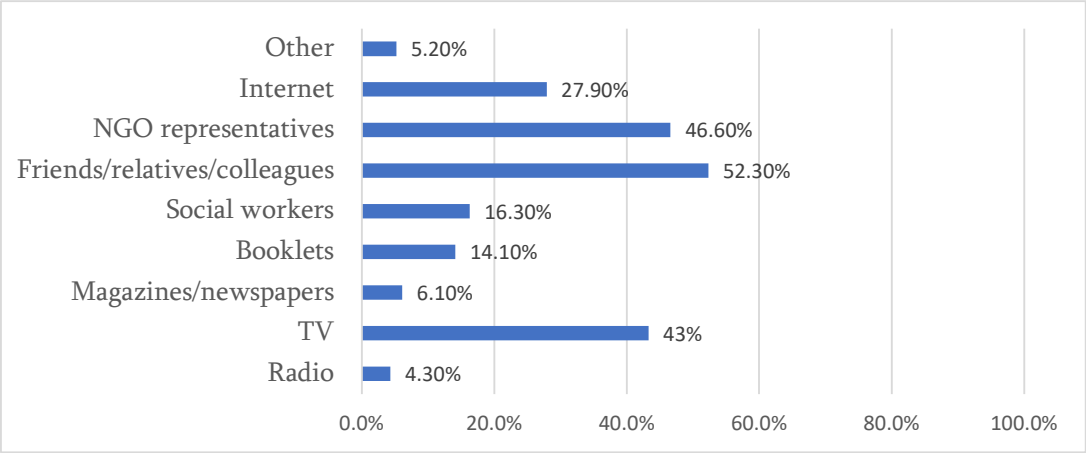
Awareness of HIV/AIDS

The majority of subjects have heard about HIV infection (n=1738, 86.7%) and AIDS (n=1941, 96,8%). 43.8% (n=862) of PWID have known someone infected with HIV, having or deceased from AIDS. 35.2% (n=303) of PWID have close friend who has been infected with HIV, has AIDS or has died of AIDS. 38.8% (n=763) of participants estimate their risk of getting HIV infection as low (Table H1).
The majority of PWID believe the risk of transmitting HIV can be reduced by: having one uninfected and devoted sexual partner (n=1733, 88.1%), using condoms during each sexual contact (n=1810, 92.0%) and switching to non-injection drugs (n=1443, 73.4%). Out of survey participants 76.4% (n=1502) think that healthy looking person can be HIV infected. 16.5% (n=325) of IDUs think that HIV can be transmitted by mosquito bite. 92.8% (n=1826) of participants think that one can get infected by using a needle already

used by someone else, while 84.9% (n=1670) believe shared injection set (utensil, spoon, cotton/filter) or water previously touched by a needle can be a source of transmission. 7.0% (n=137) consider sharing food with a person infected with HIV as a mode of virus transmission. 57.2% (n=1126) of PWID know that HIV infection can be transmitted from mother to child. 79.9% of study participants (n=1572) believe that one can be infected with HIV by using the drug solution from container, which was prepared without his/her presence.

When asked about the sources of information about HIV/AIDS, participants have reported: friends/acquaintance/relatives/colleagues (n=1029, 52.3%), non-governmental organizations (NGO) representatives/social workers (n=917, 46.6%), TV (n=851, 43.3%), Internet (n=548, 27.9%), Healthcare workers (n=321, 16.3%), and Booklets/Other printed information (n=278, 14.1%) (Table H1) (Figure H1).

Figure H2. Sources of information about HIV/AIDS



Knowledge and Attitude toward HIV testing

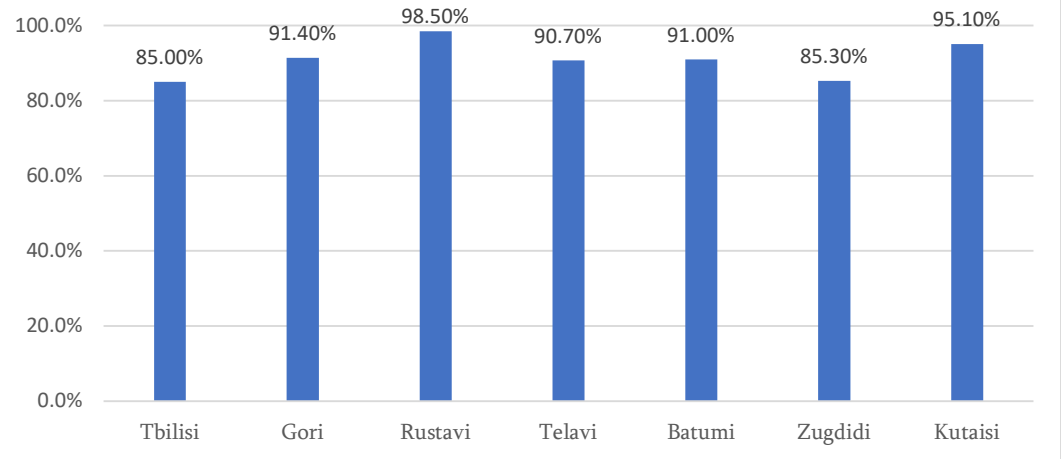
80.9% (n=1591) of the study participants think that it's possible to take a free and confidential HIV test in their neighborhood (town/city). 94.0% (n=1651) of PWID are informed about where it's possible to take an HIV test. 85.8% (n=1687) of respondents have done HIV testing at least once in their life. Only 44.6% (n=752) of PWID have done HIV testing within the last year. 91.1% (n=1492) of respondents reported taking an HIV test by their own initiative, 3.5% (n=57) needed it for a document/certificate and 1.4% (n=23) were tested in prison. 96.9% (n=1588) of PWID know HIV test result. Out of those who haven't done HIV testing, 31.9% (n=362) didn't think it was necessary, 29.8% (n=338) didn't think about it, 4.5% (n=51) didn't know where to test and 4.0% (n=45) were afraid of positive results (Table H1).

The majority of the study participants reported that if by they were infected with HIV, they would inform their spouse/regular sexual partner (n=1804, 89.9%) and injecting partners (n=1757, 87.6%). Only 73.3% (n=1470) of respondents think that they would take an HIV test if it was free and was held in a state/government facility, 10.6% (n=213) don't wish to take the test, 11.2% (n=224) didn't know the answer, and 4.9% (n=98) didn't answer the question. Out of those participants who do not wish to take an HIV test in a state/government facility, 35.2% (n=75) don't think that it's necessary, 25.4% (n=54) are concern about confidentiality of the test, 20.2% (n=43) said that the other people will find out that they are drug users, and 3.3% (n=7) are afraid that the police will find out (Table H1).

Knowledge and Attitude towards HIV/AIDS and Self-reported Risk by cities

HIV knowledge is different by cities (Tbilisi, the reference city in this analysis). The number of participants across cities who think that HIV transmission risk can be reduced by having an uninfected and devoted sexual partner are as follows: Rustavi–98.5% (n=265; p<0.001), Telavi–94.0% (n=252; p<0.001), Batumi–92.5% (n=246; p<0.001), Gori–92.5% (n=246; p<0.001), Zugdidi–90.6% (n=232; p<0.001), Kutaisi–84.7% (n=227; p<0.001) and Tbilisi–70.9% (n=265). The majority of PWID in each city (Tbilisi: n=318, 85.0%, and Rustavi: n=265, 98.5%; p<0.001), think that the risk of HIV transmission can be reduced by using condoms during each sexual contact (Tbilisi: n=318, 85.0%, and Rustavi: n=265, 98.5%; p<0.001) (Figure H2).

Figure H2. Distribution of participants by city who think that condom use reduces the risk of HIV Infection



Based on data from each city, the majority of participants (the lowest rate in Batumi: n=175, 65.8%; p<0.001) mention using a needle already used by someone else as a mode of HIV transmission. The majority of PWID in each city (the lowest rate in Batumi: n=175, 65.8%; p<0.001 and Kutaisi: n=161, 60.1%; p<0.001), think that one can get infected with

HIV by using a shared injection set (utensil, spoon, cotton/filter or water previously touched by a needle/syringe used by someone else (Table H2).

Knowledge and Attitude towards HIV testing

The majority of study participants know where to take a free HIV test, the rates across cities are as follows: Rustavi–98.9% (n=265; p<0.001), Telavi–98.1% (n=256; p<0.001), Zugdidi–97.5% (n=238; p<0.001), Kutaisi–96.9% (n=187; p<0.001), Gori–96.6% (n=252; p<0.001), Batumi–89.0% (n=195; p=0.05) and Tbilisi–83.0% (n=258). In each city the majority of participants had taken an HIV test, these results significantly different by cities and is the lowest in Kutaisi-71.3% (n=191) and the highest in Zugdidi-97.1% (n=223; OR=2.08, 95% CI:1.34-3.22). The highest rate of HIV tests taken during the last year was in Telavi–63.4% (n=166; p<0.001), then in Batumi–55.2% (n=144; p<0.001), Zugdidi–54.2% (n=136; p<0.001), Rustavi–37.2% (n=99; p<0.001), Gori–29.0% (n=76; p<0.01) and the lowest - in Kutaisi–25.5% (n=61) and in Tbilisi–19.5% (n=70). The majority of study participants know their HIV test results and this rate ranged from 91.7% (Kutaisi, n=165; OR=0.25, 95% CI:0.09-0.65) to 100% (Telavi, n=221). Kutaisi (n=205, 75.9%; OR=0.33, 95% CI:0.21-0.51) had the lowest proportion of PWID who would inform their spouse/regular sexual partner in case of being infected with HIV. The number of study participants by cities who would take an HIV test if it was free and was held in a state/government facility are as follows: Rustavi–96.3% (n=260; p<0.001), Zugdidi–89.5% (n=246; p<0.001), Telavi–79.3% (n=214; p<0.001), Gori–73.7% (n=199; p<0.01), Kutaisi–66.3% (n=179), Tbilisi–63.4% (n=241) and Batumi–48.5% (n=131; p<0.001).

Sources of HIV/AIDS information in PWID

TV was named as one of the information sources regarding HIV, which is the most popular information source in Zugdidi and the least popular in Batumi (Table H2). The most common source of information reported by participants was friends/acquaintances/relatives/colleagues, the result across cities are as follows: Rustavi–64.7% (n=174; p<0.01), Gori–58.3% (n=155), Zugdidi–58.2% (n=149), Batumi–55.3% (n=147), Tbilisi–51.1% (n=191), Telavi–40.3% (n=108; p<0.01) and Kutaisi–39.2% (n=105; p<0.01). Non-governmental organization (NGO) representatives/social workers were named as one of the most common sources of information and this rate ranged from 28.5% (Zugdidi, n=73) to 77.6% (Telavi, n=208; p<0.001). Internet was named as another common source of information, ranging from 13.9% (Batumi, n=37; p=0.04) to 48.5% (Kutaisi, n=130; p<0.001) (Table H2.4).

Table H2.4. Sources of information about HIV/AIDS by city

Cities	TV	Booklets	Social workers	Friends/relatives	NGO representatives	Internet
Tbilisi	54.0%	4.8%	5.3%	51.1%	29.9%	20.1%
Gori	27.8%	3.4%	1.1%	64.7%	36.8%	16.9%
Rustavi	48.3%	16.7%	13.8%	64.7%	48.0%	42.8%
Telavi	48.3%	36.2%	10.8%	40.3%	77.6%	18.7%
Batumi	13.2%	13.5%	47.0%	55.3%	65.8%	13.9%
Zugdidi	60.5%	12.1%	15.2%	58.2%	28.5%	37.5%
Kutaisi	53.0%	15.7%	25.4%	39.2%	45.5%	48.5%

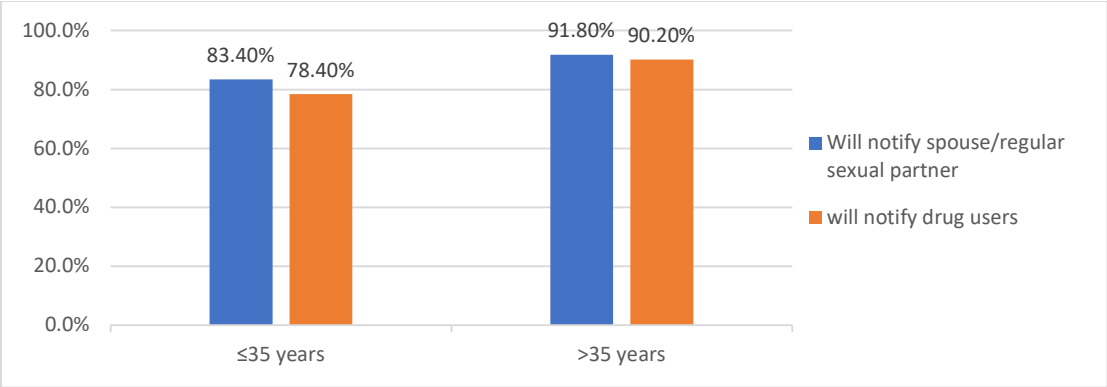
Knowledge and Attitude towards HIV/AIDS and Self-evaluation of Risks by age groups

77.9% of participants ≤35 years old have heard about HIV infection, and this number was 89.1% for participants aged >35 years (OR=2.32, 95% CI: 1.76-3.06; p < 0.001). A greater proportion (45.5%) of PWID >35 years of age had information about someone around them who has been infected with HIV, has AIDS, or died of AIDS, compared to younger PWID (OR=1.39, p<0.01). Greater proportion of >35 years old participants (n=1197, 77.4%) said that healthy looking person can get infected with HIV (OR=1.30, 95% CI:1.02-1.67; p=0.03) compared to younger PWID (n=305, 72.4%). The majority of study participants think that one can get infected with HIV by using a shared injection set (utensil, spoon, cotton/filter) or water previously touched by a needle/syringe used by someone else, this rate differs across age groups and is significantly higher among > 35 years of age. 17.5% (n=270) of >35 years old participants and 13.1% (n=55) of ≤35 years old participants say that HIV infection can be transmitted as a result of a mosquito's bite (OR=1.41, 95% CI:1.03-1.92; p=0.03). 81.2% (n=1255) and 75.3% (n=317) of participants aged >35 and ≤35 years old, respectively, say that one can get infected with HIV by using the drug solution prepared without his/her presence from the container (OR=1.41, 95% CI:1.10-1.83; p<0.01) (Table H3).

82.3% of respondents <=35 and 75.5% of >35 think that it is possible to take a free and confidential HIV test in their neighbourhood (town/city) (OR=1.51, 95% CI:1.17-1.95; p<0.01). 90.9% (n=1406) and 83.4% (n=351) of PWID above and below 35 years, respectively, know where to apply to take HIV test (OR=2.00, 95% CI:1.47-2.73; p<0.001). If by they were infected with HIV more older participants would inform their spouse/regular sexual partner (among ≤35 years old - 83.4% and >35 - 91.8%; p<0.001)

and injecting partner (90.2% and 78.4%; p<0.001) compared to ≤35 years old participants (Figure H3).

Figure H3. Participants by age groups who would notify their spouse and/or drug users if they were infected with HIV



Willingness to take an HIV test if it was free and was held in a state/government facility differs across age groups (68% of among ≤35 and 74.8.0% among >35 years old participants, p<0.01). Younger participants (n=180, 42.8%) named internet more frequently as a source of HIV/AIDS information (>35 years old participants: n=368, 23.8%; p<0.001), and TV in >35 years old participants (n=708, 45.8%; p<0.001) (Table H3).

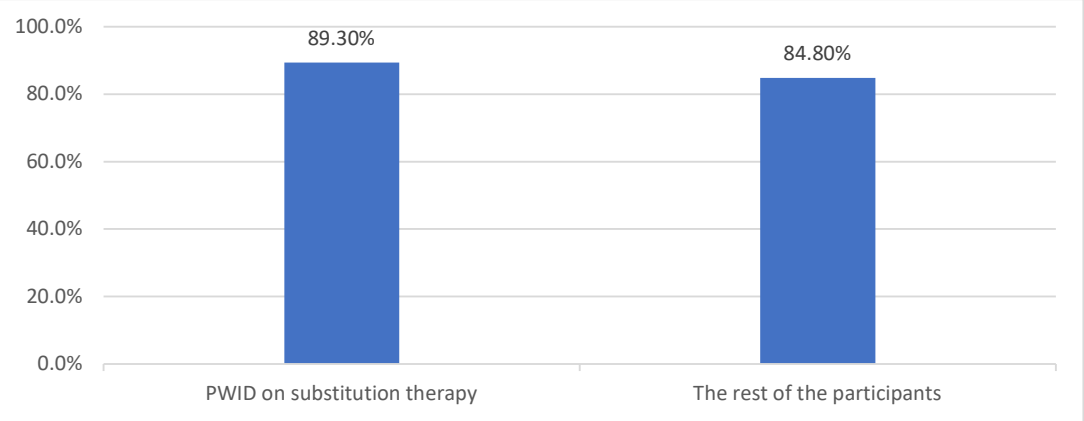
There was no statistically significant difference between the variables mentioned below: risk of getting HIV infection (about 70% in both groups), reducing the risk of HIV infection by having one uninfected and devoted sexual partner and using condoms regularly (Table H3). During the last year >35 years old participants (n=602, 40.1%) have been tested more frequently for HIV, compared to ≤35 years old participants (n=150, 37.6%). The majority of participants found out the test results (≤35 years old participants–97.2% (n=308) and >35 years old participants–98.2% (n=1280)) (Table H3).

Knowledge and Attitude towards HIV/AIDS and Self-evaluation of Risks According to the Use of Methadone/Suboxone Substitution Therapy

We tested association between the HIV knowledge and receiving OST to understand the role of OST program in increasing HIV awareness. The majority of participants who were on substitution therapy (n=249, 57.9%) knew someone who has been infected with HIV, has AIDS, or died of AIDS, compared to the rest of the participants (n=613, 39.9%) (OR=2.07, 95% CI:1.67-2.58; p<0.001). Among those who had information about another person, 65.9% of PWID (n=164, 65.9%) on substitution therapy, and 56.9% of PWID not on therapy (n=349) have a close relative or a friend who has been infected with HIV, has AIDS, or has died of AIDS. 84.2% (n=362) of participants on substitution therapy and 89.2% (n=1371) of the rest of the participants think that the risk of transmitting HIV

infection (that causes AIDS) can be reduced by having one uninfected and devoted sexual partner (OR=0.65, 95%CI:0.48-0.87; p<0.01). The larger proportion of PWID on substitution therapy (n=384, 89.3%) had HIV test compared to the rest of the participants (n=1303, 84.8%) (OR=1.50, 95% CI:1.07-2.10; p=0.02) (Figure H4) (Table H4).

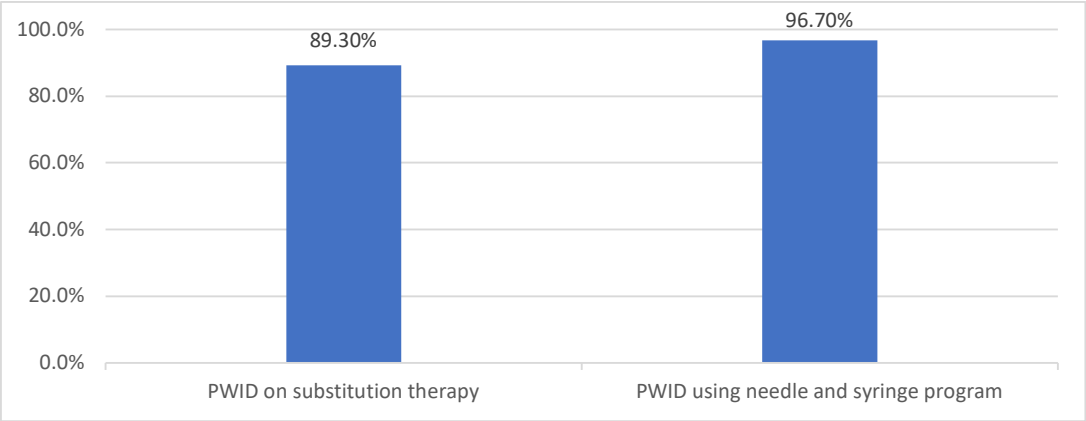
Figure H4. Distribution of PWID by use of substitution therapy who have been tested for HIV



Based on the use of substitution therapy (Methadone/Suboxone) no statistically significant difference among groups was detected in the variables below. The knowledge of HIV in both groups was almost the same (87.8% and 86.4%). The majority of PWID in both groups know where to apply for HIV testing (PWID on substitution therapy: n=351, 92.6%; the rest of the participants: n=1300, 94.3%). In both groups, the majority of PWID knew HIV test results (97.0% and 98.3%, respectively). The readiness to inform the spouse/regular sexual partner in case of being infected was also similar in both groups (Table H4).

A greater portion (n=1018, 96.7%) of people using needle and syringe program reported ever been tested for HIV compared to OST program beneficiaries (n=384, 89.3%) (Figure H5).

Figure H5. Distribution of HIV testing rates among PWID using needle and syringe program and PWID on substitution therapy



The use of preventive and treatment programs and social impact

The use of preventive programs

To decrease the transmission of infections (HIV, Hepatitis B and C, tuberculosis, STIs) and overdose mortality in PWID, there are various programs in the country that offer different services to beneficiaries. Within the harm reduction (HR) programs PWID can receive the following services free of charge:

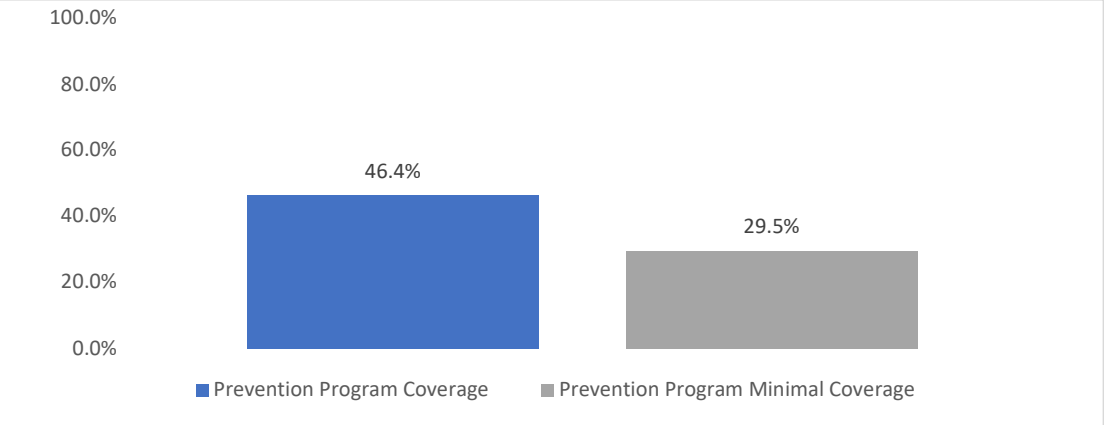
- Screening for HIV, hepatitis B and C, syphilis, and tuberculosis;
- Sterile paraphernalia (various size syringes, needles, butterfly needles, alcohol pads, tourniquets, Naloxone, injection solutions, condoms, and lubricants);
- Information materials;
- Healthcare specialist consultation;
- Participating/Attending educational activities.

Prevention program coverage

Expanding the coverage of NSP coverage and increasing the number of OST beneficiaries was one of the indicators for the „Strategic Plan for the Elimination of Hepatitis C Virus in Georgia 2016-2020". For evaluation of the preventive programs' coverage among drug users, based on the pre-determined indicators, respondents were asked two questions: 1. "If you wish to take an HIV test, do you know where to apply?" 2. "Have you ever received a sterile injection paraphernalia (syringe/needle/butterfly needle) and a condom free of charge during the last year?" According to the study results, the coverage by preventive programs among PWID was 46.4%. In addition, the study evaluated the

minimal coverage[2] of preventive programs. The minimal package of preventive programs was used by 29.5% of PWID (Figure I1). Full coverage[3] by the preventive programs was 30.4% (n= 609).

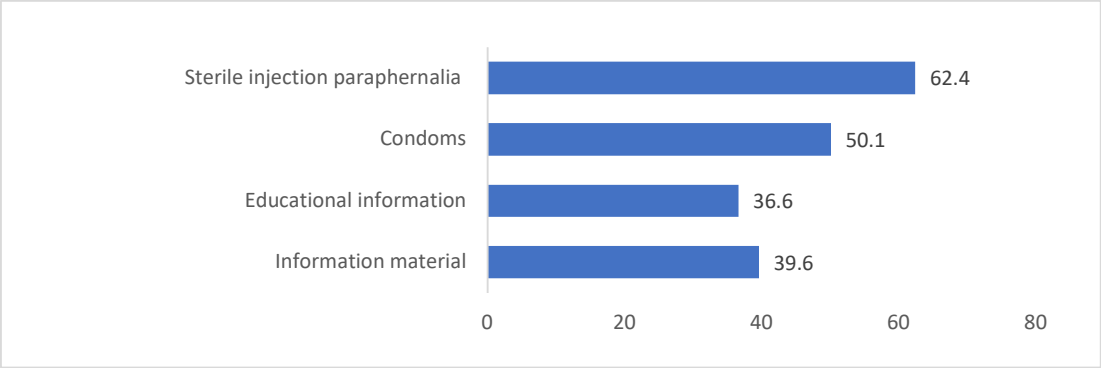
Figure I1. Coverage of prevention programs among IDU



A significant proportion of participant PWID have used various services offered within the HR programs during the last year. 62.4% (n=1211) have received sterile injection paraphernalia free of charge through preventive programs and/or syringe vending machine (SVM). 50.1% (n=971) have received free condoms (Diagram I2). 12.5% (n=242) reported using other services as well during the last 12 months. They most often received Naloxone (42.1%), sterile alcohol pads/ tourniquets/injection solutions (31.8%), and vein healing creams (21.1%) free of charge. 62.9% (n=1220) of PWID report not receiving any educational information on AIDS during the past year and 59.9% (n=1162) didn't receive brochures/pamphlets/booklets on AIDS. 77.2% (n=1519) knew where to apply for the NSP if necessary.

[2] Minimal coverage by preventive programs: Knows where to test for HIV and during the last year within the limits of a preventive program has received at least one service free of charge: sterile injection paraphernalia (syringe/needle/butterfly needle) or condom or information material or educational information on AIDS.
3 Full coverage by preventive programs: Knows where to test for HIV and have received all of the following: sterile injection paraphernalia, condom, brochures/pamphlets/booklets and educational information on HIV/AIDS.

Figure I2. Services received free of charge by the PWID through harm reduction programs during the last year



Social impact

Study participants were asked to name 2 people who have an impact on them to continue using drugs. According to 87.2% (n=1749) of respondents, no one can influence them. However, needle partners were named as key people having an impact in terms of continuing drug use by a small proportion of PWID (n=264, 13.2%).

Participants were also asked about people who have the biggest impact on them to cease using drugs. 57.5% reported that no one around can influence them to stop using drugs. However, an equal number of participants (26.4%) named spouse/sexual partner and friends as those having this type of influence (Table I1).

The use of treatment programs

PWID were asked several questions about the use of treatment programs and about stopping drug use without medical help. 25% (n=501) have experience in stopping using drugs without any medical help. 62.3% (n=1250) have never received drug use related treatment or specific assistance. Out of those PWID (n=749, 37.4%) who have applied to a medical facility or specific center to get treatment/specialized assistance, the majority (72.2%) used these services during the last 12 months. 83.2% of respondents (n=436) that are receiving treatment or have received treatment in the past 12 months, are Methadone/Suboxone substitution therapy beneficiaries. PWID have received treatment in different cities, although the highest percentage report receiving treatment in Tbilisi (32.6%) (Table I2).

Participants were asked about their desire to get other treatment or specific assistance and the majority (85.5% n=438) reported none.

We asked PWID about the key reasons for not receiving treatment or specific assistance during the last 12 months. The lack of desire was mentioned by almost half (n=888, 44.3%) of respondents. For 10.8% (n=216) it was too expensive. The location of the

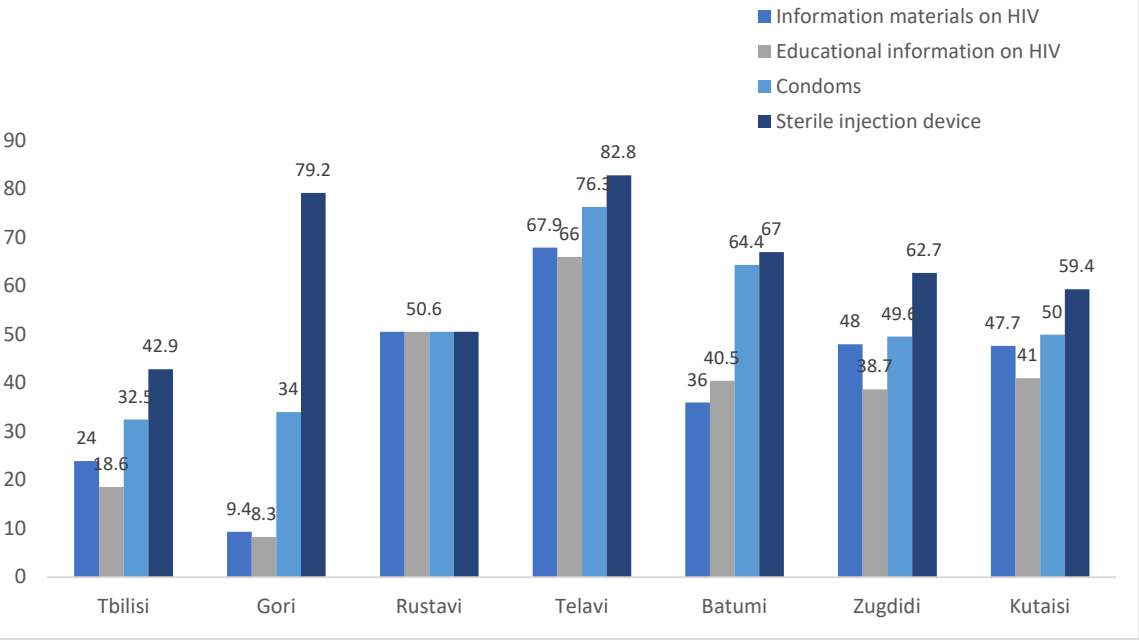
medical facility, lack of available service providers, and unsatisfactory conditions were named as key barriers for not receiving treatment or specific assistance by a small percentage of participants (Table I1).

Use and coverage of treatment and preventive programs by city, age and employment status

Use and coverage of preventive programs use and coverage by cities

For the evaluation of preventive and treatment program use across cities Tbilisi was used as a reference group. During the last year, the types of services received by PWID are different across cities. 79.2% of PWID living in Gori have received sterile injection devices free of charge, which is the highest compared to other cities ($p < 0.001$). PWID living in Telavi ($p < 0.001$) and Batumi ($p < 0.001$) have most often received condoms from the program. Only a small proportion of respondents have received information material. This rate is the lowest in Gori (9.40%) ($p < 0.001$) compared to other cities (Table I3). By the educational information and materials received on AIDS Telavi statistically significantly ranks first across cities (66% and 67.9% respectively) (Figure I3)

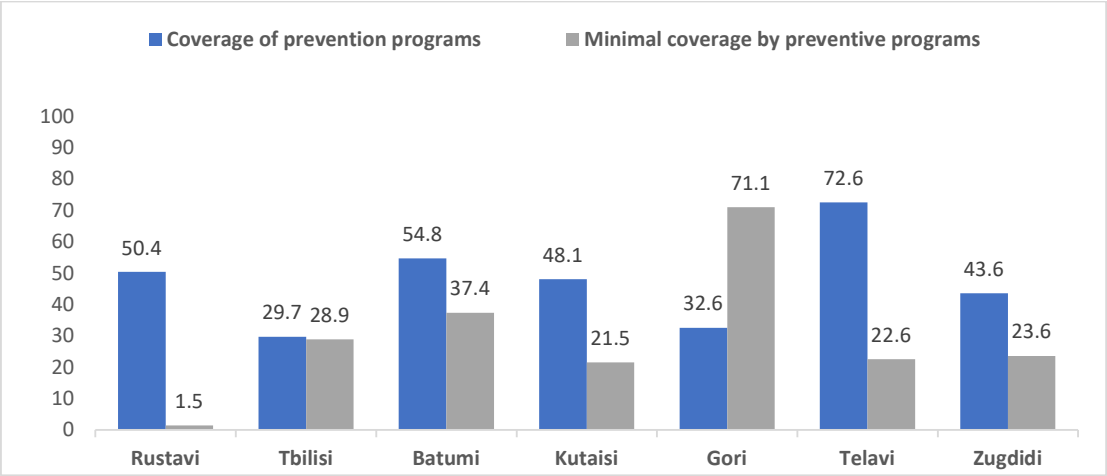
Figure I3. Services received by the PWID in the limits of preventive programs



The coverage of drug users by preventive programs was evaluated by UNGASS (United Nations General Assembly Special Session on HIV/AIDS) indicators [18]. Coverage of preventive programs across cities is different. Telavi has the highest rate of preventive program coverage (72.6%, OR 6.26; $p < 0.001$), while Gori is on the first place with the

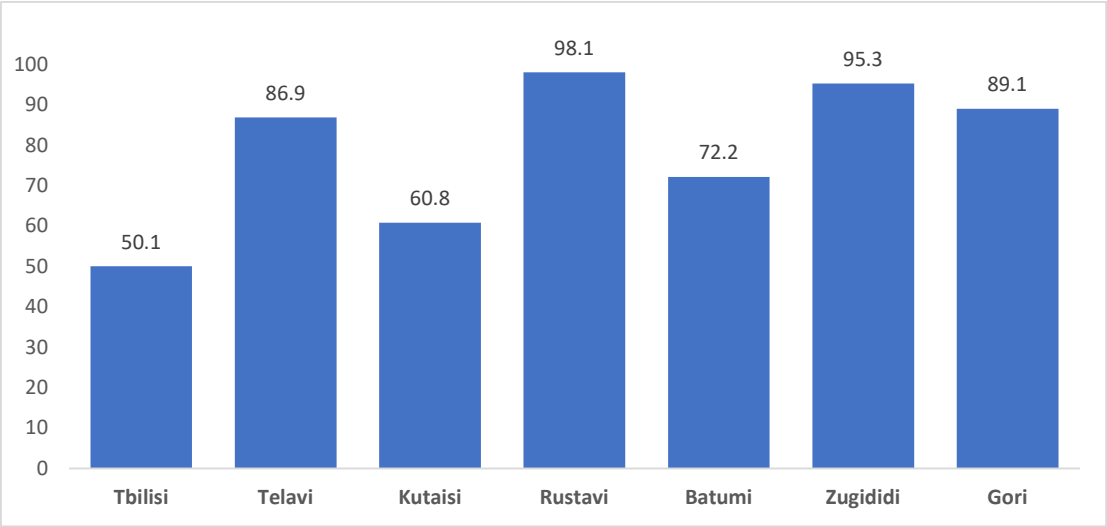
minimal coverage rate (71.1%, OR 6.04; p<0.001). The lowest rate of minimal coverage with preventive programs was noted in Rustavi (1.5%, OR 0.04, p <0.001) (Figure I4.).

Figure I4. Coverage of preventive programs by cities



The majority of PWID living in Rustavi (98.1%) (p <0.001), Zugdidi (95.3%) (p <0.001), and Gori (89.1%) (p <0.001) knew where to apply for NSP (Figure I5).

Figure I5. The knowledge of NSP by cities

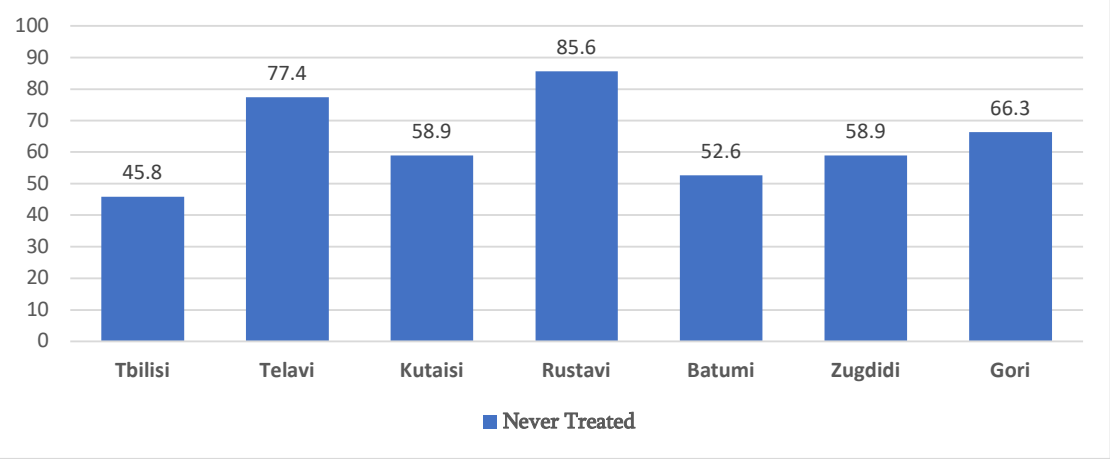


Study participant PWID were asked to name 2 people who would have an impact on their decision to continue or stop using drugs. According to the majority of PWID in each city, no one can influence them. However, needle partners were named as key people having an impact on continuing drug use (n=264, 13.2%). This rate is the lowest in Gori (3.8%). Spouses/sexual partners and friends were also named as key people having an impact on the decision of continuation or stopping drug use by PWID living in Gori (n=39, 60%) (Table I3.1/2/3).

The use of treatment programs across cities

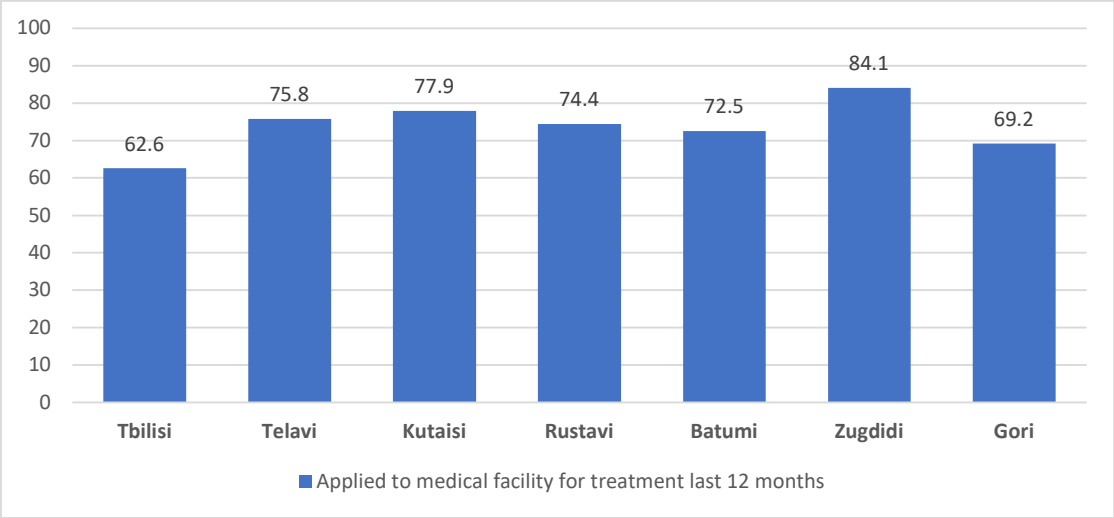
Zugdidi respondents (34.5%) have the most extensive experience in quitting using drugs without medical help, while Kutaisi respondents have the least (13.0%). The percentage of respondents who have ever received treatment/special medical assistance for addiction ranges between 14.4% (n=39, Rustavi) and 54.2% (n=206, Tbilisi) (Figure I6).

Figure I6. The treatment of drug addiction at narcological institutions



The majority of PWID living in different cities who have applied to medical facilities or specialized centres for treatment/specific assistance during the last year are also receiving treatment at this moment (Figure I7). The majority of respondents (Tbilisi - 90.6% (n=115); Telavi - 81% (n=77); Batumi - 82.2% (n=74), Zugdidi - 81.9% (n=77), Kutaisi - 81.9% (n=68), Gori - 69.8 (n=44) and Rustavi- 69% (n=20)), who are currently being treated or have been treated in the last 12 months are on Methadone/Suboxone replacement therapy. The lack of desire was named as the key reason for not receiving treatment or specific assistance in the last 12 months by the majority of PWID in every city. More than half of PWID living in Telavi (55.9%) and Gori (55.2%) didn't have the desire to receive the treatment. The unfavourable location of a medical facility was most often named as the key reason for not receiving treatment by the majority of Kutaisi respondents. ($p < 0.001$) (Table I4.1/2/3).

Figure I7. Use of drug dependence treatment at medical facility/specialized center by cities



Preventive programs use and coverage by age

During the last year, the use of every component of the preventive programs is higher among older PWID compared to younger ones (Information material - 40.6% vs 35.8%; Educational information - 37.2% vs 34.6%; Condoms received from the program - 50.1% vs 50.0; Sterile injection devices - 63.6% vs 57.9%). A statistically significant association was observed only between receiving the sterile injection devices and age (p=0.034). The knowledge of the NSP is also higher in PWID older than 35 (OR 1.36; p=0.015) (Table I5.).

No statistically significant association was found between preventive program coverage and age (Table I5).

The use of treatment programs by age

The experience of quitting using drugs without medical help is higher in PWID ≤35 years (28.0%), compared to PWID >35 years (24.1%). However, this difference is not statistically significant. The similar proportion of both age groups have applied to medical facilities (73% and 72.2%). 14.6% of young PWID have received detoxification with Methadone/Suboxone during the last year, which is insignificantly higher compared to PWID >35 years (11.8%) (p=0.460). The most often received service during the last year for majority of PWID was Methadone/Suboxone replacement therapy. Among those who received treatment during last year 83.9% of >35-year-old PWID are currently on Methadone/Suboxone replacement therapy (OR 1.82; p=0.028) (Table I6.).

Preventive program use and coverage by employment status

36.1% (n=723) of study participants were employed (they had a permanent or an occasional job), whereas 63.9% (n=1282) were unemployed (student, pensioner/disabled, and jobless). The usage rate of different packages offered by preventive programs was higher in employed PWID compared to unemployed PWID (educational material on AIDS - 43.0% vs 37.6%, qualified educational information - 39.0% vs 35.3%, condoms received through the program - 53.6% vs 48.0; injection devices - 66.0% vs 10.4%). There was a statistically significant association between the use of the above-mentioned services and employment status, except receiving educational materials on AIDS.

More employed PWID know where to apply for the NSP (78.6%), compared to unemployed PWID (no statistically significant association, p=0.330). The coverage of preventive programs is higher among employed PWID (50.5% vs 44.1%, p=0.006). No statistically significant association was found between full or minimal coverage of preventive programs and employment status (Table I7.).

The use of treatment programs by employment status

The rate of quitting using drugs without medical help ("Quitting cold turkey") is high among employed PWID (26.1%) (p=0.370). Compared to employed PWID (31.7%) ($p<0.001$), unemployed PWID have more often received treatment/specific assistance for being drug users (40.6%). However, during the last year, this difference was not observed (72.5% vs 72.2%) (p=0.945). Also, the majority of both employed and unemployed PWID, who have applied to a medical facility during the last year, were currently receiving treatment (76.3% vs 79.7%).

A Statistically significant association was observed between PWID employment status and particular types of treatment. The majority of drug users, who were receiving treatment during the study or during the last 12 months were on Methadone/Suboxone replacement therapy. No statistically significant association was observed between the employment status and types of treatment.

Distribution of study participants by risky injection practices HIV infection and hepatitis C status

The images below describe the distribution of PWID recruited by "seeds" participating in the study by cities. The images were created using NetDraw software. The risk behavior, HIV infection and hepatitis C status of PWID were indicated through figures and colors. Safe behavior for PWID were determined based on several variables (has not used an injection equipment already used by someone else; has not used a needle/syringe left by someone else at gathering place; has not used a syringe pre-filled by someone else; has not used shared injection items (spoon, utensils, etc.); has not used a drug solution from a shared container). On the images below, large figures indicate "seeds", and the rest of the figures depict the following information:

	HIV and HCV negative, safe injection practice
	HIV and HCV negative, risky injection practice
	HIV and HCV positive, safe injection practice
	HIV and HCV positive, risky injection practice
	HIV positive, HCV negative, safe injection practice
	HIV positive, HCV negative, risky injection practice
	HIV negative, HCV positive, safe injection practice
	HIV negative, HCV positive, risky injection practice

Image 1: Distribution of PWID in Tbilisi by risky behavior and HIV infection/hepatitis C status

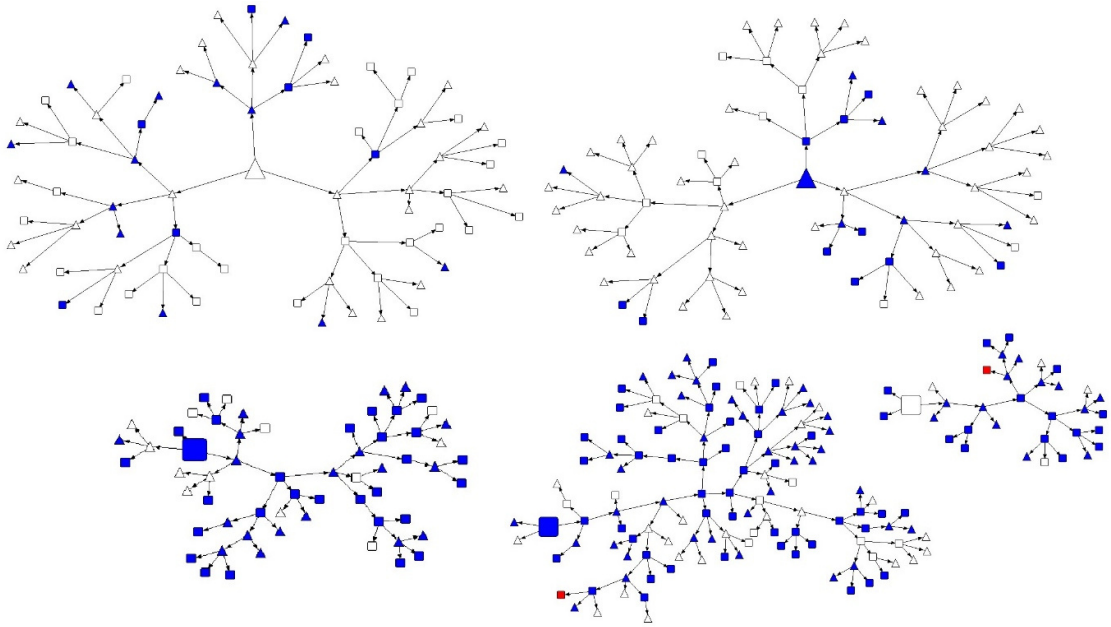


Image 2: Distribution of PWID in Gori by risky behavior and HIV infection/hepatitis C status

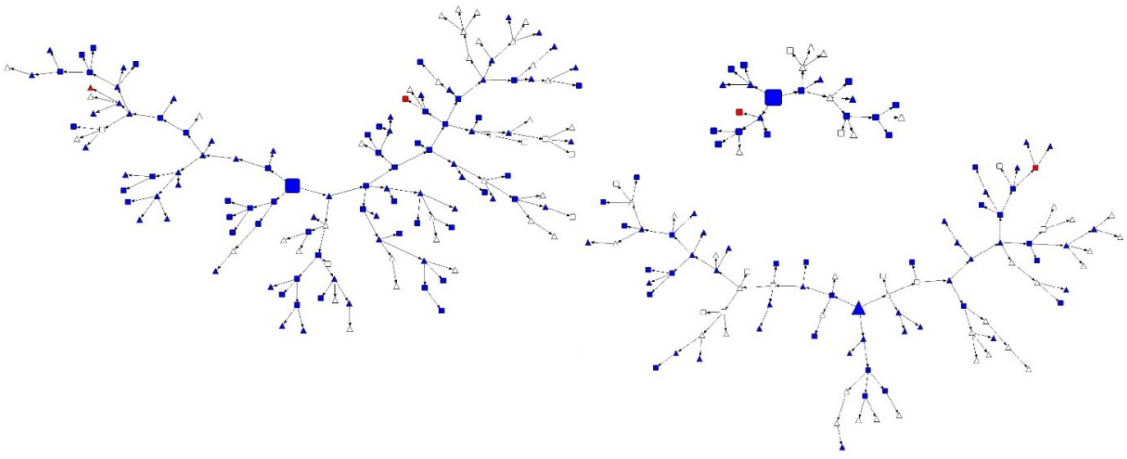


Image 3: Distribution of PWID in Rustavi by risky behavior and HIV infection/hepatitis C status

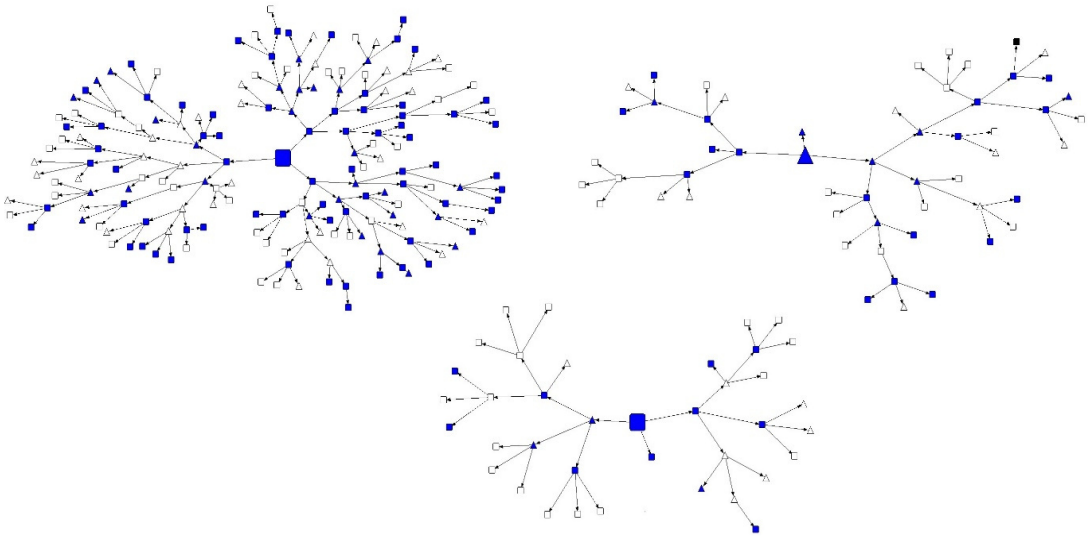


Image 4: Distribution of PWID in Batumi by risky behavior and HIV infection/hepatitis C status

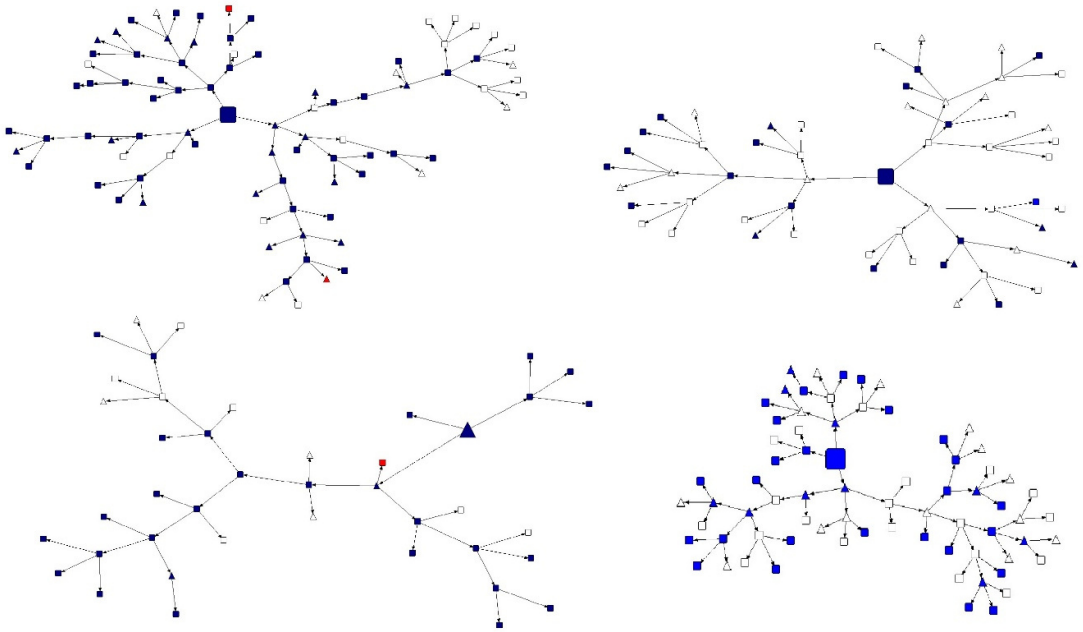


Image 5: Distribution of PWID in Zugdidi by risky behavior and HIV infection/hepatitis C status

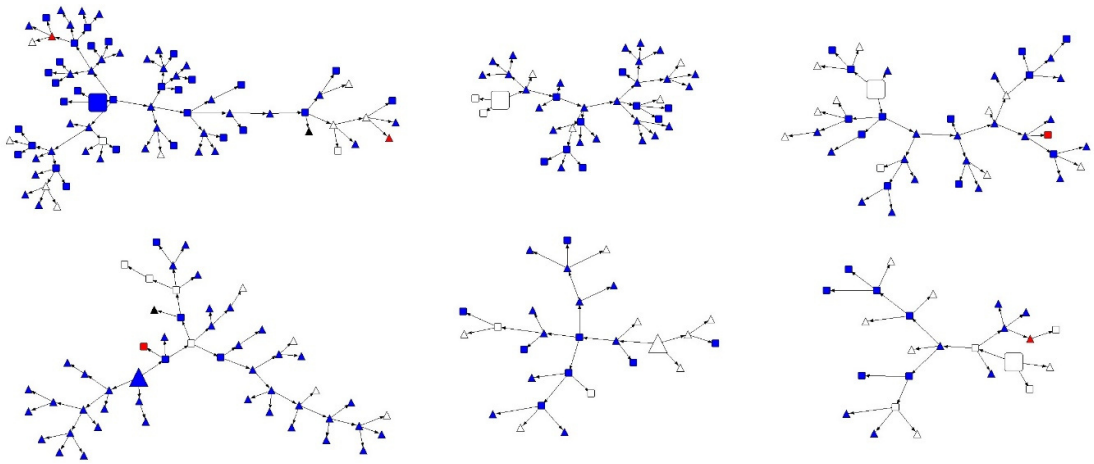


Image 6: Distribution of PWID in Kutaisi by risky behavior and HIV infection/hepatitis C status

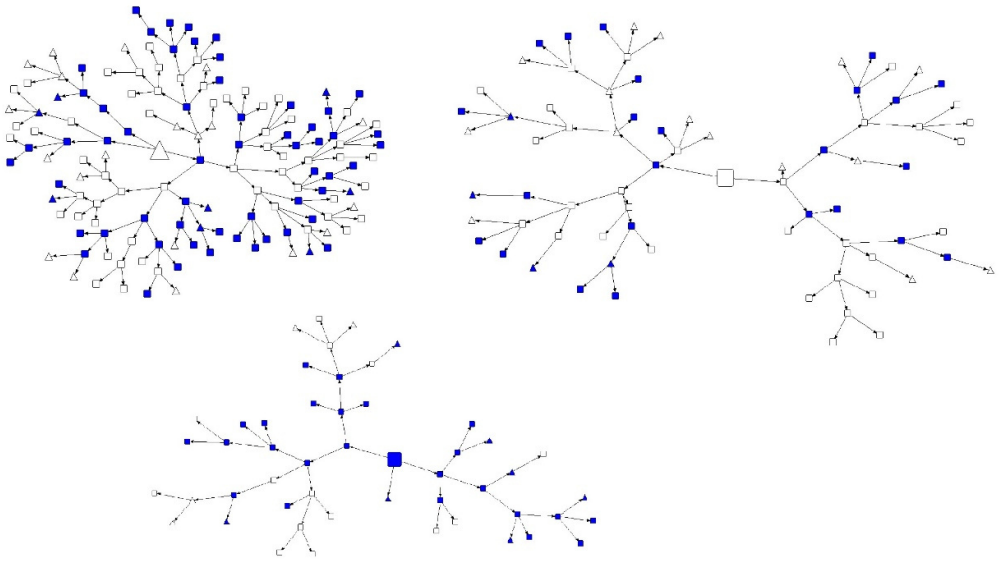
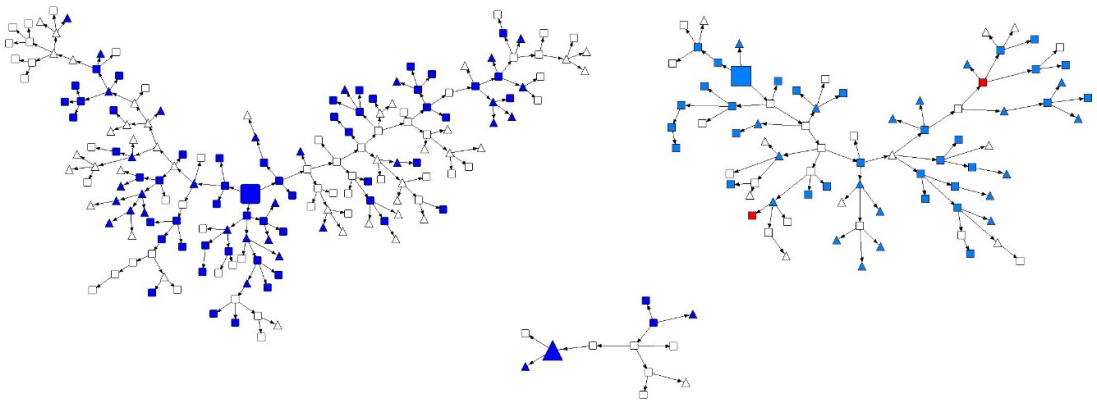


Image 7: Distribution of PWID in Telavi by risky behavior and HIV infection/hepatitis C status



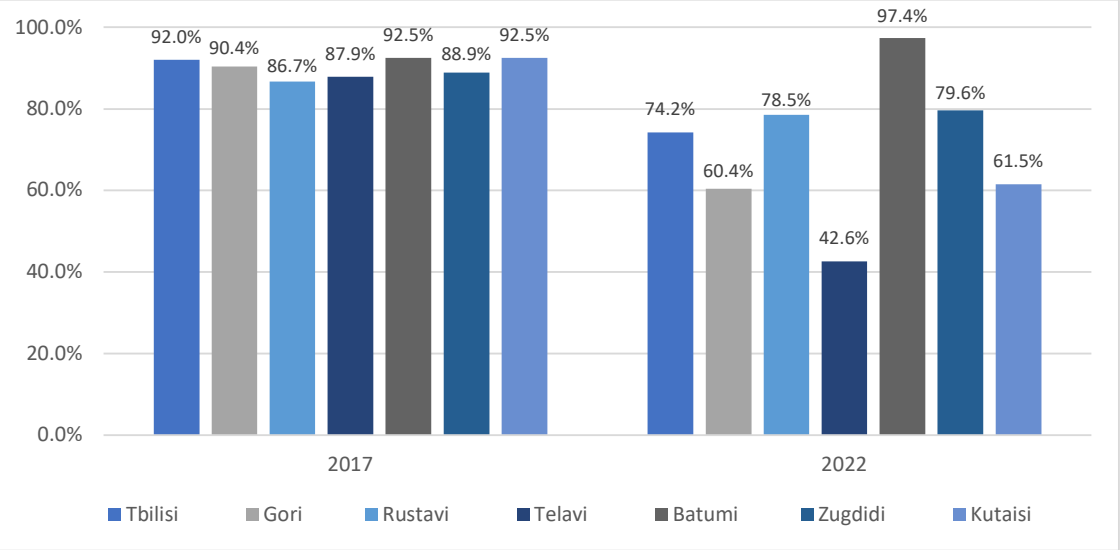
Comparison of 2017 and 2022 survey data

Note: As 2017 study database was not available only descriptive comparison was conducted and statistical significance of differences were not measured.

Drug use history

According to the 2017 survey, from at least 86.7% (in Rustavi) to 92.5% (in Kutaisi and Batumi) of PWID reported that they were addicted to drugs. In 2022 these data varies from 42.6% (in Telavi) to 97.4% (in Batumi) (Chart B7).

Chart B7. drug addiction



In 2022 there are more respondents who inject drugs several times a day. In 2017, respondents from Tbilisi and Kutaisi had the highest rate of injecting several times a day, while in 2022 lowest rate was observed in Telavi (3.3%) and the highest rate in Rustavi (25.2%).

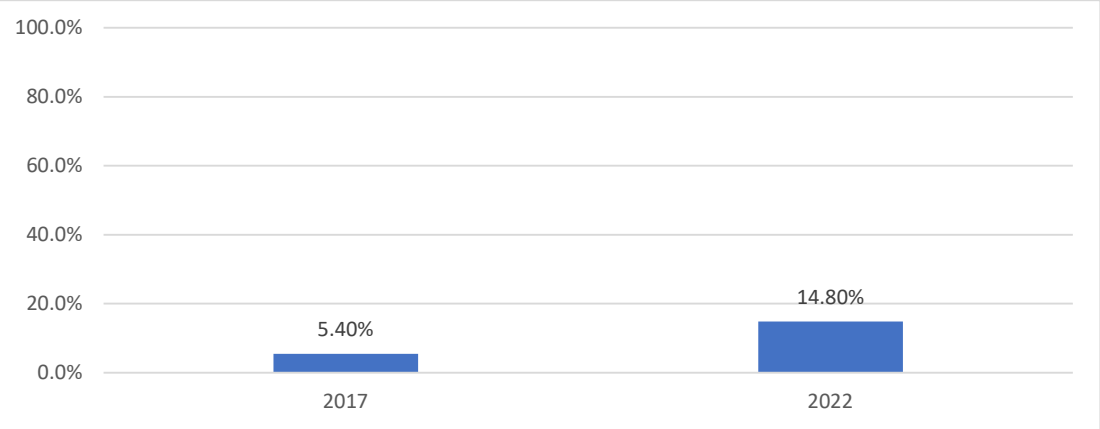
The rate of non-injecting use of psychoactive substances in the last month does not differ between surveys conducted in 2017 (82.8%) and 2022 (81.6%).

There is no difference between the most frequently used substances injected in the last month - in both studies Heroin, Buprenorphine, and Methadone make up the top 3 substances injected during the last month. The number of respondents who inject ephedra ("Tsitsvebi vint") has almost halved - 20% of respondents in 2017 and 10% in 2022. Dezomorphine ("Crocodile") injection has also decreased (2017 - 17.3% vs 2022 - 1%). Rustavi clearly leads in Heroin use in both studies. Methadone injection rate has increased from 10.1% (2017) to 19% (2022).

Comparison of risk behavior related to drug use

64.7% of the 2022 and 60.3% of the 2017 study participants reported using already used injection devices. 2.6% of participants in 2017 reported using injection devices already used by someone else during the last drug injection and in 2022 this number was 4.0%. Compared to the 2017 study (5.4%) the rate of the use of needles or syringes by PWID already used by themselves has increased in the 2022 study (14.8%) (Figure C8).

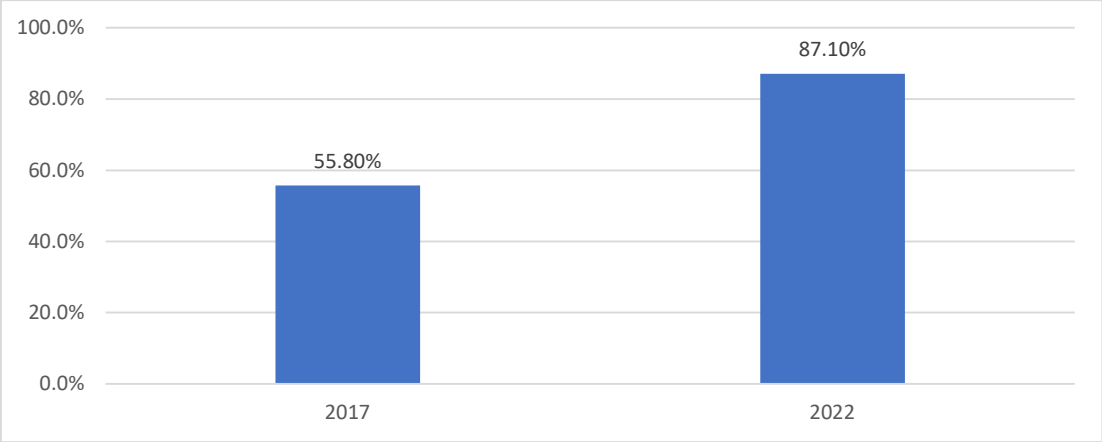
Figure C8. Percentages of PWID who, during the last drug injection, used a needle or a syringe already used by themselves



Fewer number of 2022 study participants reported the use of injection devices already used by someone else during the last month (2.8% and 6.3%, respectively). During the last month, 2017 participants cleaned already used injection devices more often compared to the 2022 study participants (64.2%)

Greater proportion of the 2022 study participants (87.1%) reported throwing used injection devices into garbage after the last use, compared to the 2017 study participants (55.8%) (diagram C9).

Diagram C9. The rates of last used injection device disposal into the garbage



In both studies (2017 - 93.6%; 2022 - 85.7%), most of the participants mention that they buy new, sterile needle/syringe/other injection device at pharmacy. In 2022 survey, greater part of the participants (57.6% vs 32.9%) received new, sterile injection device from NSP. The number of overdose cases has increased (10.1% of PWID in 2022 survey and 6.1% in 2017 survey reported having overdose in the last year). A greater proportion of the study participants in 2022 survey used (ever, in the last month, during the last injection) already used injectables, also pre-filled syringe, shared injection item (bottle, spoon, dish, etc.) and drug solution from the container prepared without his presence during the last injection. Compared to 2017, in 2022 more participants receive sterile injectable devices from the NSP.

Sexual behavior

84.7% of the surveyed individuals reported having sex with a partner of the opposite sex in the past 12 months. 2017 study showed similar results - the majority of the participants (89.3%) had sexual intercourse with a partner of the opposite sex in the past 12 months (Figure D1). Only 31.4% of the study subjects used a condom during the last sexual intercourse and this indicator is reduced compared to 2017 study (36.5%) (Figure D2).

Figure D1. Had sex with the opposite sex partner during the last 12 months

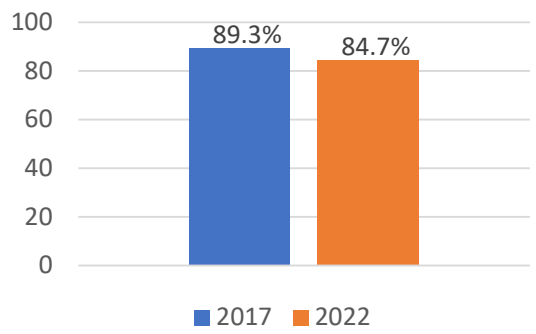
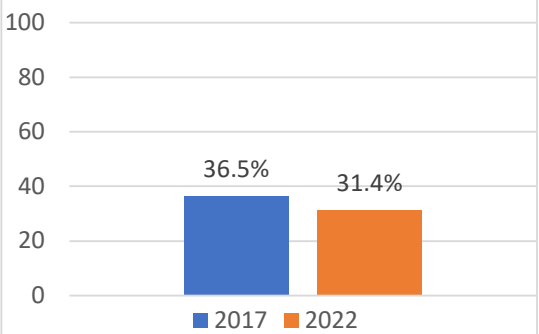


Figure D2. Used condom during the last sexual intercourse



The rate of same-sex intercourse did not change in PWID compared to 2017 (Figure D3), although the rate of condom use at the last homosexual intercourse decreased from 50% to 36% (Figure D4).

Figure D3. Ever had same-sex sexual partner

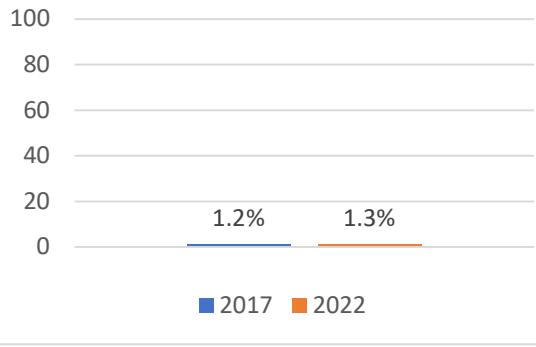
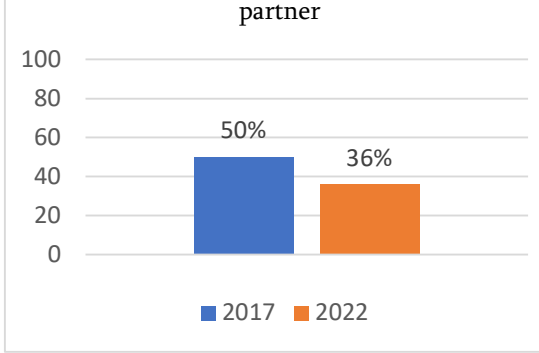


Figure D4. Used condom during the last sexual intercourse with same-sex partner



Rates of anal sex and condom use at the last anal sexual intercourse during past 1 year increased slightly compared to 2017 data (4.6% vs 6.5% and 43.6% vs 46.6%, respectively) (Figures D5 and D6).

Figure D5. Had anal sex with any sexual partner during the last 12 months

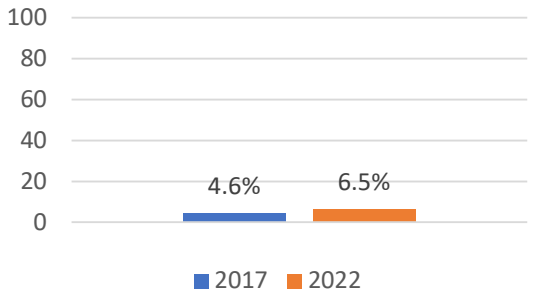
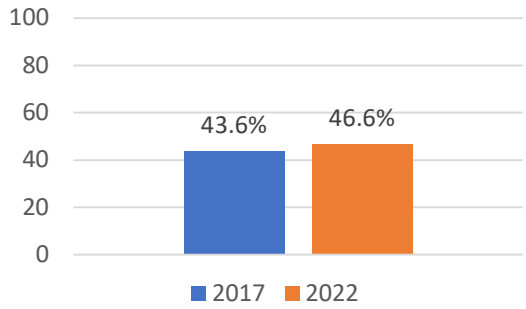
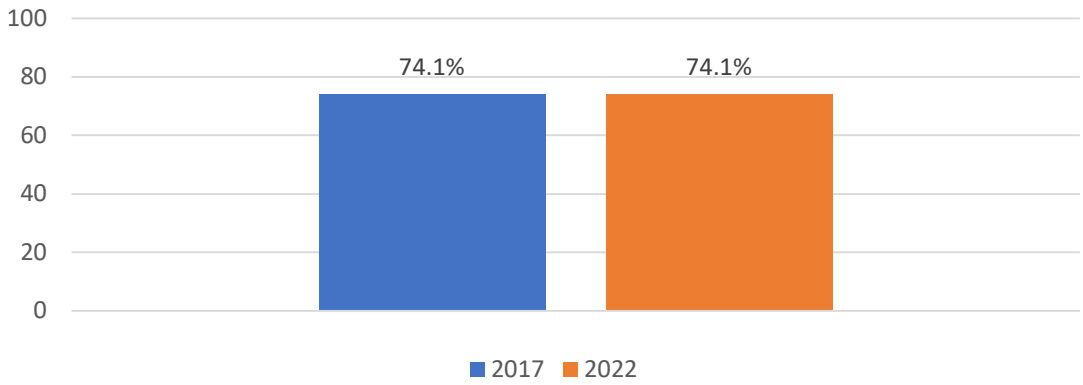


Figure D6. Used condom during the last anal sexual intercourse



Similar to the results of the 2017 study, in the current study, the majority of the surveyed PWID (74.1%) had a regular sexual partner in the past 12 months (Figure E1).

Figure E1. Had sex with regular sexual partner during the last 12 months



Only 29.3% of the interviewed PWID used a condom during the last sexual contact with a regular sexual partner and this indicator is slightly higher compared to the 2017 survey (Figure E2).

Compared to 2017, in 2022 the frequency of "always using" condoms with a regular sexual partner in the last 1 year has doubled (6.3% vs 12.8%), but the frequency of "never using" condoms with a regular sexual partner remained unchanged (37.3% vs 38.6%) (Figure E3).

Figure E2. Used condom during the last sexual intercourse with regular sexual partner

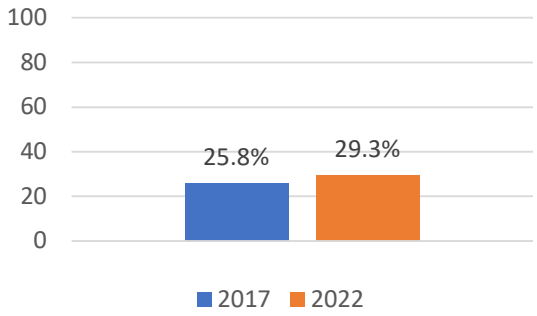
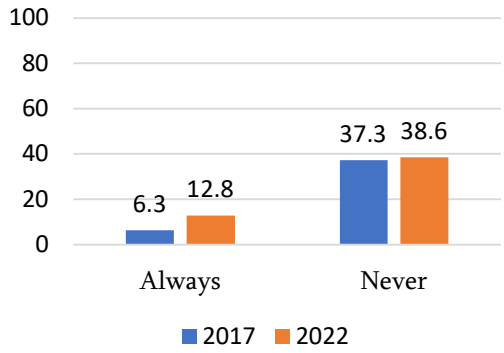


Figure E3. Frequency of condom use with regular sexual partner (%)



Compared to 2017, the frequency of sexual contact with a casual sexual partner in the last 12 months has significantly decreased. If in 2017 survey 43.1% of the interviewed PWID claimed to have had sex with a casual sexual partner in the last 1 year, in 2022 survey only 25.8% of respondents confirmed the above (Figure E4). During the last sexual contact with a casual sexual partner, 71.9% of study participant PWID used a condom, which significantly exceeds the same indicator of the 2017 survey (60%) (Figure E5).

Figure E4. Had sex with casual sexual partner during the last 12 months

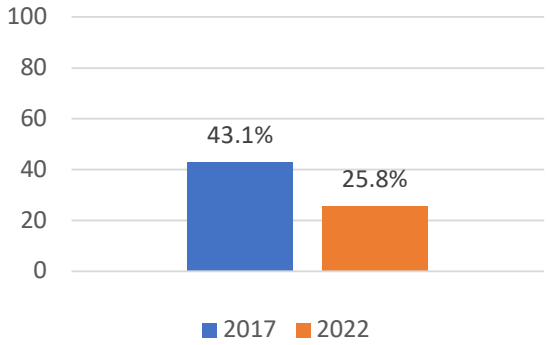
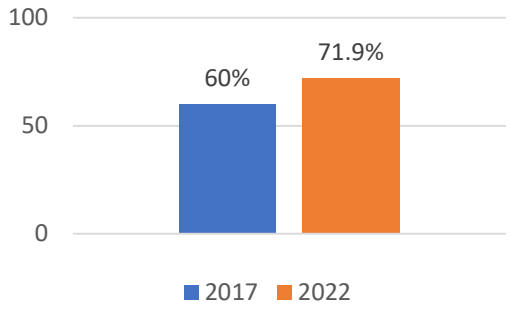
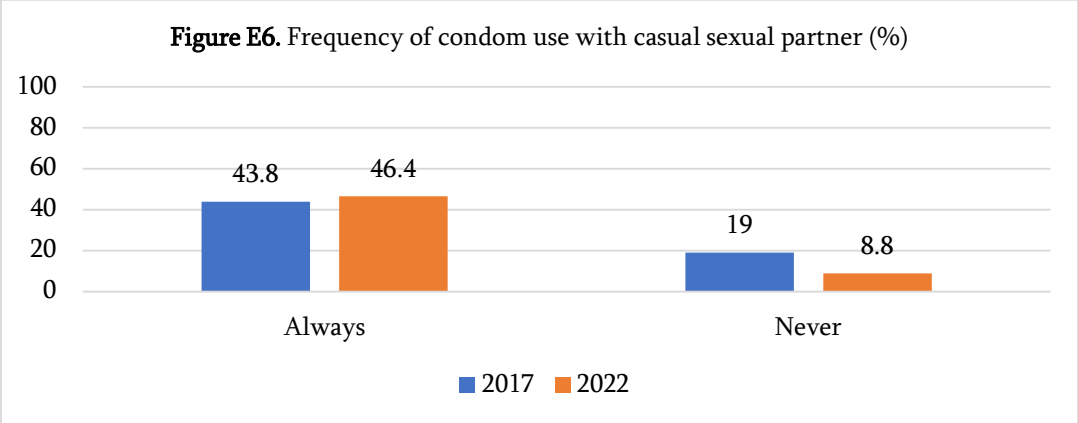


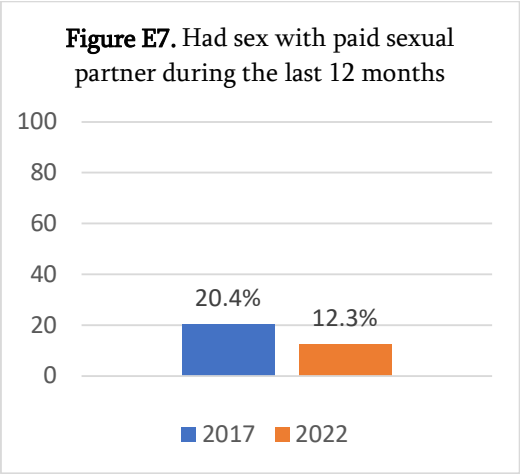
Figure E5. Used condom during the last sexual intercourse with casual sexual partner

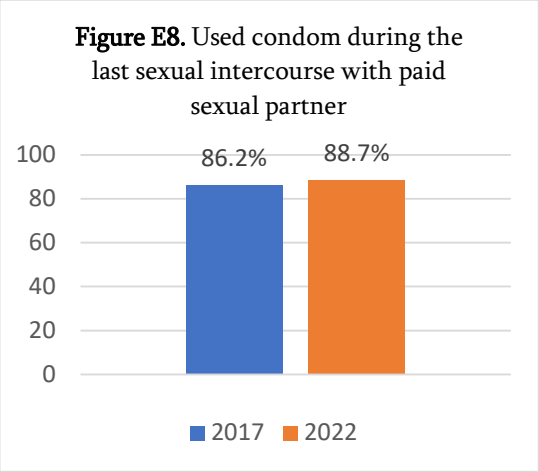


Compared to the results of the 2017 survey, there was no change in the frequency of "always using" condoms with a casual sexual partner in the last 1 year (43.8% vs 46.4%), although the frequency of "never using" significantly decreased (19.0% vs 8.8%) (Figure E6).



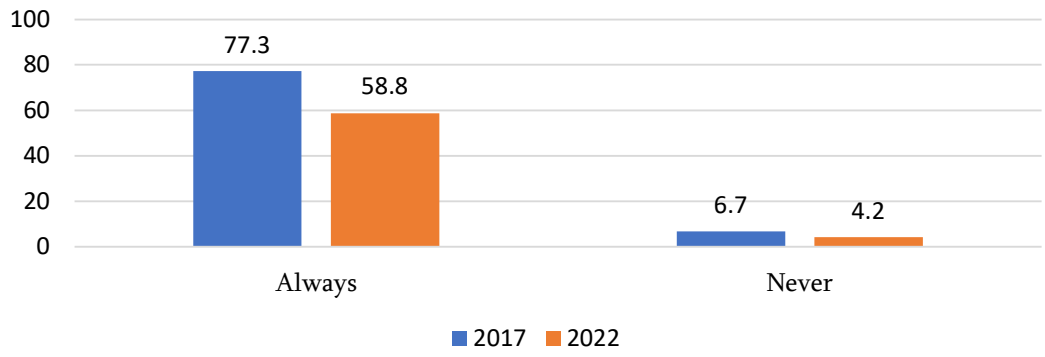
During the last 12 months, 12.3% of the study participant PWID had a paid sexual partner, which is a lower rate compared to 2017 survey (20.4%) (Figure E7). 88.7% of respondents used a condom during the last intercourse with a paid sexual partner, which is similar to the 2017 survey, when 86.2% of respondents confirmed the use of a condom during the last paid sexual contact (Figure E8).





Compared to 2017 survey, the current study showed a decrease in the frequency of "always using" condoms with a paid sex partner (77.3% vs 58.8%). Also, the frequency of "never using" condoms with a paid partner decreased (6.7% vs 4.2%) (Figure E9).

Figure E9. Frequency of condom use with paid sexual partner (%)



Among married PWID 18.7% had a casual sex partner and 5.7% had a paid sex partner in the past 12 months, which is significantly reduced compared to the 2017 survey (35.3% and 29.4%, respectively) (Figures E10 and E11).

Figure E10. Married PWID had sex with casual sexual partner during the last 12 months

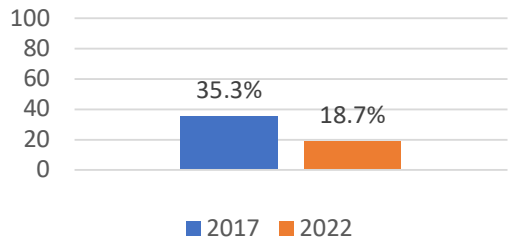
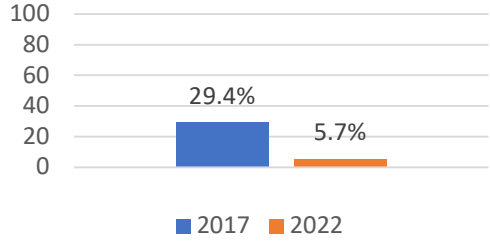


Figure E11. Married PWID had sex with paid sexual partner during the last 12 months



Compared to the 2017 study, some improvement was observed in the following sexual practices: probability of using a condom during the last sexual contact with a casual sexual partner has increased (71.9% in 2022 vs 60% in 2017). The likelihood of having a casual sexual partner in the last 1 year decreased (43.1% had sex with a casual sexual partner in 2017, and 25.8% in 2022). The frequency of never using condom with casual sexual partner in the last 1 year has significantly decreased (19.0% in 2017 vs 8.8% in 2022).

There were no improvements in the following sexual practices since the 2017: no change in condom use during last sexual intercourse (31.4% in 2022 vs 36.5% in 2017); no change in "condom never-users" with regular partner in the last 1 year (38.6% in 2022 vs. 37.3% in 2017); no change in likelihood of using condom during the last intercourse with paid sexual partner (86.2% in 2022 vs 88.7% in 2017); condom use during the last anal intercourse is still low (43.6% in 2022 vs 46.6% in 2017).

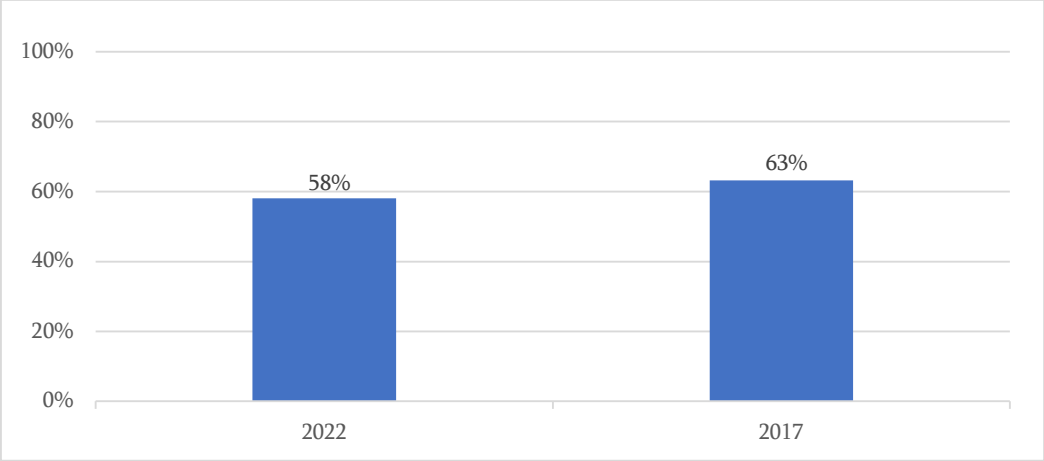
Two sexual practices worsened compared to the 2017 IBSS data: condom use during the last same-sex intercourse decreased from 50% (in 2017) to 36% (in 2022); condom use

during paid sex (proportion of condom "always-users") decreased (58.8% in 2022 vs 77.3% in 2017).

HIV, HBV and HCV infections

More than half of respondents (58.1%) are HCV seropositive, which is slightly less compared to data from the 2017 study (63.2% (Figure F1). Among target cities, Zugdidi has the highest rate (76.7%) followed by Gori, Batumi, Tbilisi, Telavi, Rustavi, and Kutaisi with 66.7%, 58.1%, 55.5%, 52.2%, 51.5% and 46.3%, respectively. These data differ from data collected during the 2017 study, where Batumi dominated with 74.2%, followed by Tbilisi (74.1%), Gori (66%), Kutaisi (65.2%), Rustavi (50.2%), Zugdidi (51%) and Telavi (49%).

Figure F1. Anti-HCV prevalence



Because HCV RNA and HBsAg tests were not conducted during the previous study, comparison of chronic HCV infection, HCV reinfection and HBsAg prevalence was not possible.

0.9% of study participants are HIV positive - 2.5 times less compared to the previous study result (2.3%).

Knowledge and Attitude towards hepatitis C

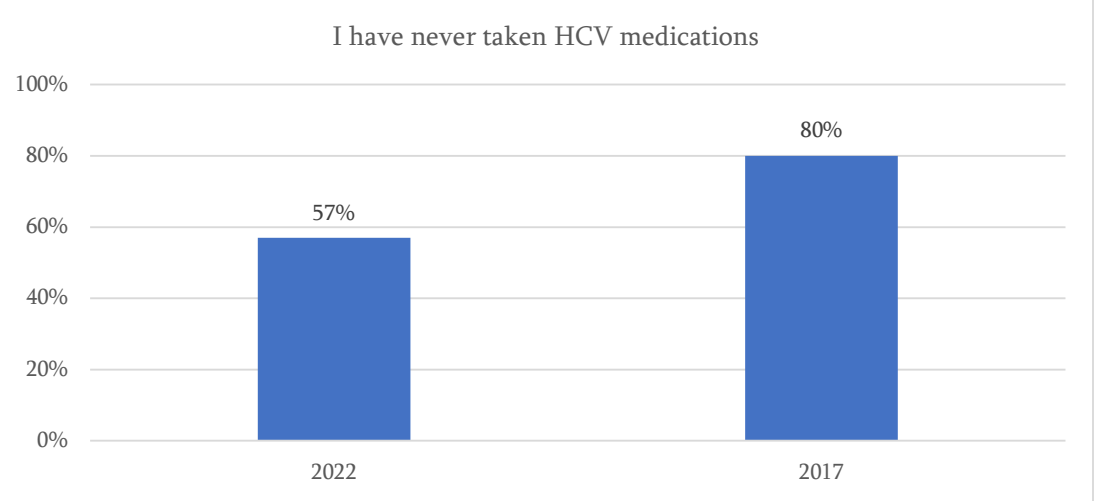
The percentage of PWID who named sharing used needle/syringe, sharing hygiene products, and sexual intercourse as a mode of HCV transmission was higher during the 2017 study (98.8% vs 96.4%, 93.1% vs 79.7% and 64.1% vs 52.2%, respectively). One-tenth of participants (11.2%) haven't heard about the hepatitis C elimination program, compared to 1.6% during the previous study. 88.6% in 2022 and 78.8% in 2017 knew where to take HCV test. More than half of respondents (56.6%) have taken a hepatitis C test during the last 2 years, similar to previous study (57.6%). The proportions of

respondents who reported "I do not think it is necessary" and "I have not thought about it" as the reasons for not being tested on HCV were also similar in 2022 and 2017 studies.

80.5% and 56.9% of PWID have never taken medications for hepatitis C treatment during the previous and the current studies, respectively (Figure F2). 4.2% of PWID stopped the treatment, with 6.8% in 2017. The main reason for treatment interruption reported by PWID was side effect in both 2022 and 2017 studies (42.4% and 30.0%, respectively). As side effects related to current HCV treatment regimens are extremely rare it is unlikely to be the real reason for HCV treatment interruption.

50.1% prefer to receive hepatitis C services (testing, confirmation, treatment) at the hepatitis C treatment medical facility in their city, and 51.4% prefer to receive the services in harm reduction center in their city. These data differ from the previous study where the medical facility was preferred by 87.2% and harm reduction center - by 3.2%.

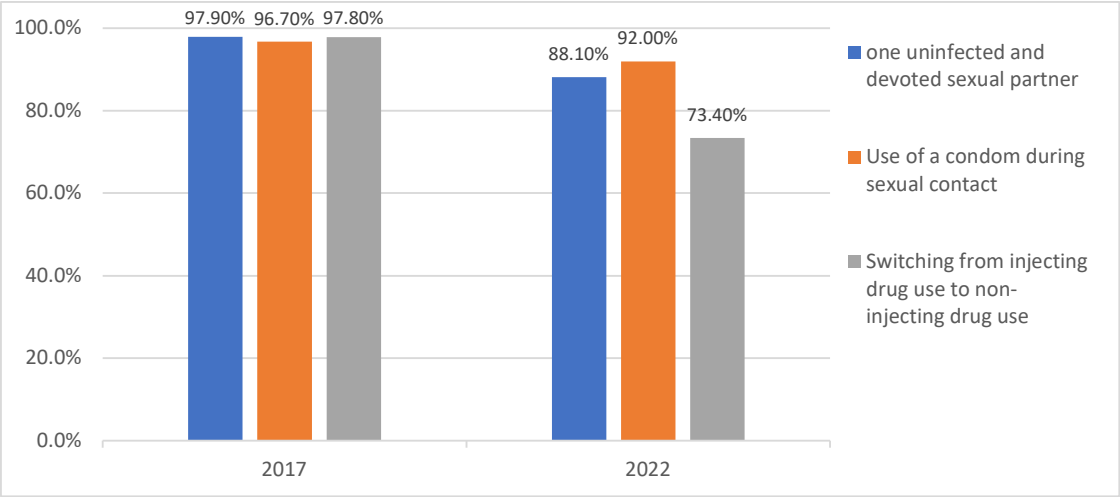
Figure F2. HCV treatment



Knowledge and attitude towards HIV/AIDS and perceived risks

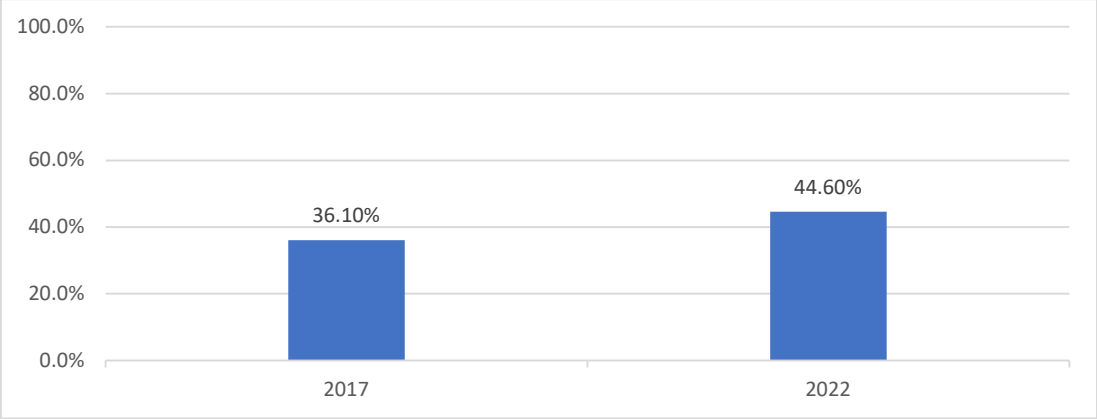
Majority of PWID have heard about HIV/AIDS (2017: 99.8%, 2022: 97.8%). A greater proportion of PWID in the 2017 study said that the risk of transmitting HIV infection can be reduced by having one uninfected sexual partner (97.9%), by using condoms during each sexual contact (96.7%) and by switching to noninjecting drugs (97.8%), compared to 2022 study results (88.1%; 92.0% and 73.4%, respectively) (Diagram H6).

Diagram H6. Comparison of ways to reduce the risk of HIV transmission with data from the 2017 study



94.5% and 76.4% participants of 2017 and 2022 studies, respectively, think that a healthy-looking person can be infected with HIV. A greater portion of the 2017 study participants (99.0%) noted that one can get infected with HIV by using a needle already used by someone else, compared to the 2022 study results (92.8%). More participants in the 2022 study know where it is possible to take a free and confidential test in their neighborhood (town/city), compared to the 2017 study results (80.9 vs 74.9%). Compared to the 2017 data (36.1%), more PWID in the 2022 study (44.6%) had done HIV testing during the last year (Diagram H7).

Diagram H7. Comparison of HIV testing rates in the last year



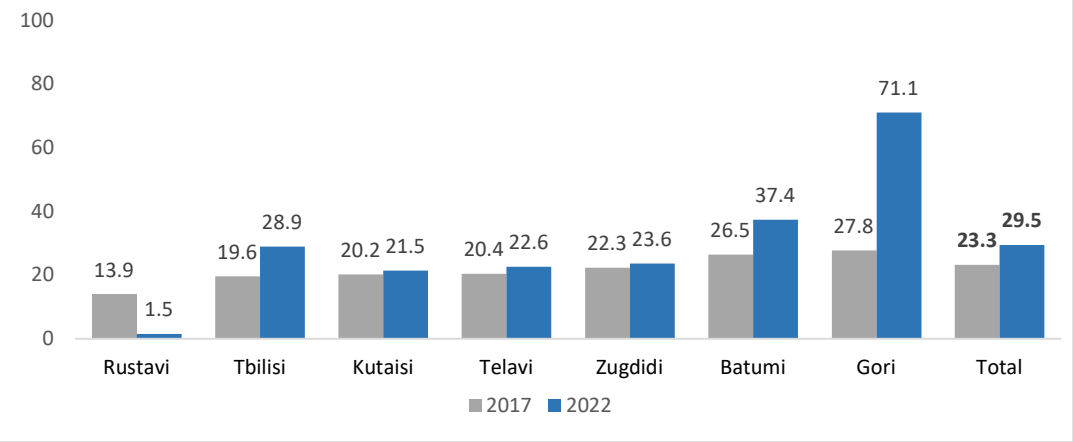
An almost equal number of participants in both studies would inform their spouse/regular sexual partner (92.3% in 2017 and 89.9% in 2022 study) and drug users if they were HIV infected with (93.1% in 2017 and 87.6% in 2022). More people knew where to take HIV test in 2022 than in 2017 (89.3% vs 64.5%).

Use of preventive programs

According to the 2022 survey, among the services received, the rate of receiving injectables is highest, followed by condoms. In 2017 the frequency of receiving sterile injection materials was the highest, followed by the informational-educational materials on AIDS.

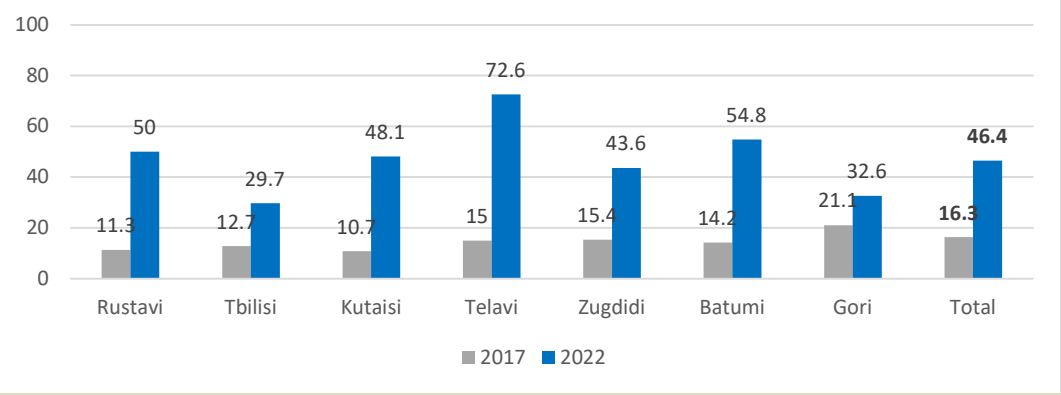
In 2022, the indicator of minimal coverage with preventive programs is 29.5%, with 24% in 2012; 32.4% in 2015; 23.3% in 2017 (Figure I8).

Figure I8. Minimal coverage with preventive programs



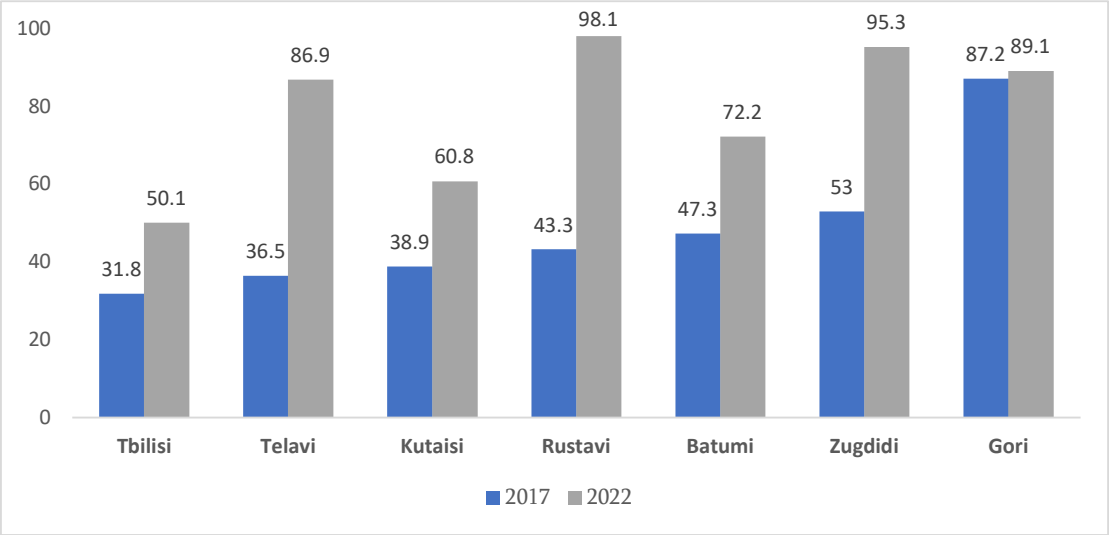
In 2022, the coverage with preventive programs (46.4%-2022 vs 16.3%-2017) and full coverage with preventive programs (30.4%-2022 vs 12.3%-2017) improved compared to 2017 (Figure I9).

Figure I9. Coverage with preventive programs



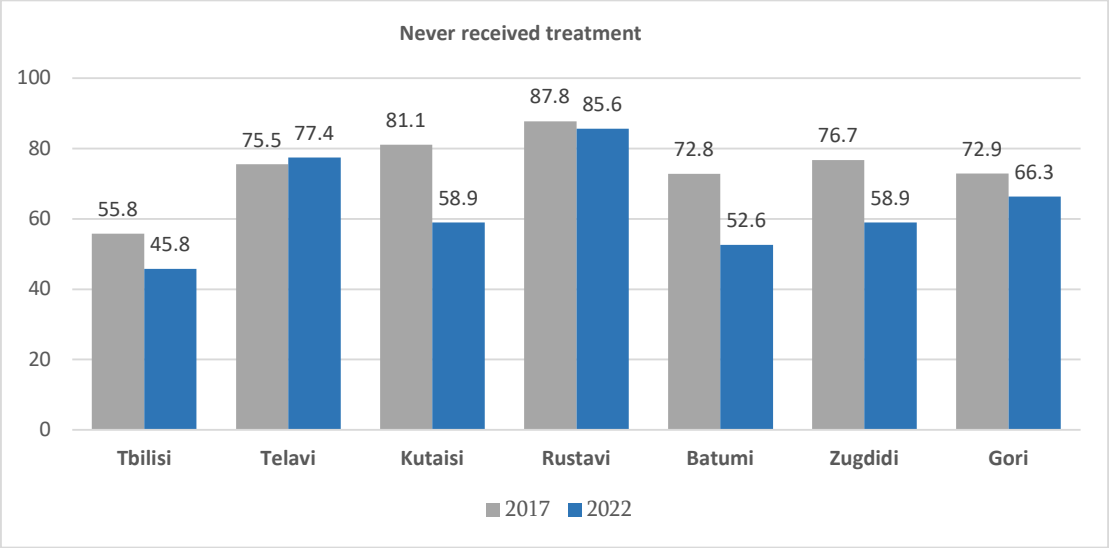
Compared to 2017 (52.4%), the knowledge about where to apply for NSP in Georgia, if needed, has increased by 2022 (77.2%). Awareness about NSP program has increased in all cities selected for the study (Figure I10).

Figure I10. Awareness about NPS



Compared to IBSS 2017 data, the proportion of respondents who had never received treatment for drug use in 2022 has decreased in almost all cities except Telavi (Figure I11).

Figure I11. Treatment at drug addiction treatment clinics



As in 2017, treatment facilities remain not accessible to a large proportion of PWID (62.3%). However, compared to 2017 study this indicator increased significantly, where only 6.8% of respondents had received any type of treatment or were under the treatment during the study period.

There is difference in the type of drug addiction treatment between 2017 and 2022 studies. In 2022, among PWID who have received treatment or are currently on the treatment for drug addiction the majority (82.3%) were/are beneficiaries of

methadone/suboxone substitution program. While in 2017 in most cases PWID carried out self-treatment or asked for help from their relatives.

Almost equal proportion of PWID tried to stop using drugs without medical help both in 2017 (22.4%) and in 2022 (25%).

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Appendix 1. Tables

Table A1. Socio-demographic characteristics of the study participants

Characteristics	N	%
City		
Tbilisi	380	19.0
Gori	270	13.5
Telavi	270	13.5
Zugdidi	275	13.7
Batumi	270	13.5
Kutaisi	270	13.5
Rustavi	270	13.5
How many times have you participated in the same survey?		
Once	334	16.7
Twice	122	6.1
More than 2	110	5.5
None	1412	70.4
Refused to answer	27	1.3
Lite BSS		
Yes	80	4.0
Missing	1925	96.0
Age		
18-24 years	60	3.0
25-30 years	149	7.4
31-40 years	529	26.4
>41 years	1267	63.2
Gender		
Male	1977	98.6
Female	28	1.4
Nationality		
Georgian	1826	91.1
Other	76	3.8
Refused to answer	103	5.1
Education		
None	4	0.2
Primary (1- 4 classes)	11	0.5
Secondary (school, technical school, vocational school)	1212	60.4
Incomplete Higher	189	9.4
Higher	577	28.8
Refused to answer	12	0.6
Employment		
Pupil/student	12	0.6
Have a permanent job	262	13.1
Have a temporary job	461	23.0
Retired/disabled	65	3.2
Unemployed	1177	58.7
Refused to answer	28	1.4
How much is your monthly income?		
100 or less	128	6.4
100-300 GEL	369	18.4
300-500 GEL	337	16.8
500-700 GEL	441	22.0
700-1000 GEL	199	9.9
1000 and more	351	17.5
Refused to answer	180	8.9

What is your marital status?		
Married	985	49.1
Divorced/Living separated from the spouse	448	22.3
Widow/widower	55	2.7
Has never been married	517	25.8
With whom do you live now?		
With a spouse	853	42.5
With a partner	46	2.3
Single	377	18.8
With parents/relatives	615	30.7
Other	81	4.0
Refused to answer	33	1.6
Have you ever been imprisoned (prison, prison camp)?		
Yes	1029	51.3
No	942	47.0
Refused to answer	34	1.7
Have you ever been imprisoned (prison, prison camp)?		
Once	387	19.3
Twice	383	19.1
Three times	123	6.1
More than 3	136	6.8
No	942	47.0
Refused to answer	34	1.7
How old were you when you were imprisoned for the first time?		
<18 years	66	6.4
18-30 years	539	52.4
>31 years	200	19.4
Refused to answer	224	21.8
When was the last time you were imprisoned?		
0-6 months ago	24	2.3
7-12 months ago	42	4.1
>1 years	735	71.4
Refused to answer	228	22.2
How long have you been imprisoned last time?		
0-3 months	44	4.3
3-6 months	168	16.3
7-12 months	87	8.5
1-2 years	209	20.3
>2 years	288	28.0
Refused to answer	233	22.6
Have you ever used drug while being imprisoned?		
Yes	232	22.5
No	346	33.6
Refused to answer	451	43.8
Have you detained in administrative sentence (fine) because of your drug use during the last 12 months?		
Yes, once	57	5.5
Yes, twice	3	0.3
Yes, three times	1	0.1
No	716	69.6
Refused to answer	252	24.5
Have you imprisoned before trial because of your drug use during the last 12 months?		
Yes, once	40	3.9
Yes, twice	2	0.2

No	727	70.7
Refused to answer	260	25.3
Have you imprisoned because of your drug use during the last 12 months?		
Yes, once	17	1.7
Yes, twice	1	0.1
No	748	72.7
Refused to answer	263	25.6
After your release from prison last time, when did you take a drug injection?		
In 1 day	174	16.9
In 2-15 days	207	20.1
In >15 days	118	11.5
Doesn't remember	115	11.2
Refused to answer	415	40.3
Within the last month how often have you consumed alcoholic beverages, such as beer, wine, vodka, other?		
Every day	127	6.3
More than once a week	332	16.6
Once a week	257	12.8
Rarely	692	34.5
Never	569	28.4
Other	7	0.3
Refused to answer	21	1.0

Table 1.3.1. Socio-demographic characteristics of the study participants by RDS-MOD method

Characteristics	Descriptive statistics		RDS-MOD		
	N	%	%	95% CI	
				Lower	Upper
How many times have you participated in the same survey?					
Once	334	16.7	17.2	14.8	19.8
Twice	122	6.1	6.5	4.6	8.9
More than 2	110	5.5	5.6	3.8	8.2
None	1412	70.4	69.5	64.0	74.6
Refused to answer	27	1.3	1.2	0.6	2.4
Lite BSS					
Yes	80	4.0	3.4	2.2	5.1
Missing	1925	96.0	96.5	94.8	97.7
Age					
18-24 years	60	3.0	2.5	1.8	3.5
25-30 years	149	7.4	7.4	5.6	9.6
31-40 years	529	26.4	26.7	22.7	31.1
>41 years	1267	63.2	63.5	57.9	68.7
Gender					
Male	1977	98.6	98.7	97.9	99.2
Female	28	1.4	1.3	0.8	2.1
Nationality					
Georgian	1826	91.1	90.7	87.9	92.9
Other	76	3.8	4.0	2.7	6.0
Refused to answer	103	5.1	5.3	3.6	7.7
Education					
None	4	0.2	0.2	0.1	0.5
Primary (1- 4 classes)	11	0.5	0.5	0.3	1.2
Secondary (school, technical school, vocational school)	1212	60.4	59.4	52.7	65.9
Incomplete Higher	189	9.4	10.3	8.3	12.8
Higher	577	28.8	28.9	22.7	36.1
Refused to answer	12	0.6	0.6	0.4	1.1
Employment					
Pupil/student	12	0.6	0.6	0.3	1.2
Have a permanent job	262	13.1	12.9	9.3	17.6
Have a temporary job	461	23.0	22.4	18.7	26.4
Retired/disabled	65	3.2	3.4	2.3	4.9
Unemployed	1177	58.7	59.3	53.3	65.1
Refused to answer	28	1.4	1.5	0.8	2.7
How much is your monthly income?					
100 or less	128	6.4	6.2	4.1	9.1
100-300 GEL	369	18.4	18.5	14.2	23.7
300-500 GEL	337	16.8	15.1	11.8	19.2
500-700 GEL	441	22.0	22.8	19.6	26.3
700-1000 GEL	199	9.9	10.1	8.1	12.5

1000 and more	351	17.5	18.4	13.9	23.9
Refused to answer	180	8.9	8.9	5.6	13.9
What is your marital status?					
Married	985	49.1	49.0	46.0	52.0
Divorced/Living separated from the spouse	448	22.3	23.8	21.0	26.8
Widow/widower	55	2.7	2.7	2.1	3.6
Has never been married	517	25.8	24.4	21.9	27.2
With whom do you live now?					
With a spouse	853	42.5	43.0	39.6	46.4
With a partner	46	2.3	2.7	2.0	3.8
Single	377	18.8	18.9	16.6	21.4
With parents/relatives	615	30.7	29.9	27.5	32.5
Other	81	4.0	3.8	2.6	5.6
Refused to answer	33	1.6	1.6	0.8	3.3
Have you ever been imprisoned (prison, prison camp)?					
Once	387	19.3	20.3	17.8	23.0
Twice	383	19.1	19.1	15.2	23.8
Three times	123	6.1	6.7	4.9	9.0
More than 3	136	6.8	7.7	5.7	10.2
No	942	47.0	44.9	38.6	51.4
Refused to answer	34	1.7	1.4	0.9	2.3
How old were you when you were imprisoned for the first time?					
<18 years	66	6.4	6.3	4.7	8.3
18-30 years	539	52.4	54.2	47.8	60.6
>31 years	200	19.4	19.1	13.9	25.7
Refused to answer	224	21.8	20.4	16.2	25.4
When was the last time you were imprisoned?					
0-6 months ago	24	2.3	2.4	1.5	3.7
7-12 months ago	42	4.1	4.0	2.8	5.7
>1 years	735	71.4	73.0	66.8	78.5
Refused to answer	228	22.2	20.6	15.7	26.6
How long have you been imprisoned last time?					
0-3 months	44	4.3	4.2	2.4	7.5
3-6 months	168	16.3	17.5	14.4	21.1
7-12 months	87	8.5	8.3	5.8	11.7
1-2 years	209	20.3	20.0	17.9	22.2
>2 years	288	28.0	28.4	24.4	32.6
Refused to answer	233	22.6	21.6	17.1	27.0
Have you ever used drug while being imprisoned?					
Yes	232	22.5	24.5	21.4	27.9
No	346	33.6	33.0	26.3	40.4
Refused to answer	451	43.8	42.5	34.9	50.5
Have you detained in administrative sentence (fine) because of your drug use during the last 12 months?					
Yes, once	57	5.5	6.5	4.9	8.5
Yes, twice	3	0.3	0.4	0.1	1.9
Yes, three times	1	0.1	0.0	0.0	0.3

No	716	69.6	69.8	63.2	75.7
Refused to answer	252	24.5	23.2	17.4	30.3
Have you imprisoned before trial because of your drug use during the last 12 months?					
Yes, once	40	3.9	4.5	3.0	6.9
Yes, twice	2	0.2	0.2	0.0	0.8
No	727	70.7	71.4	65.1	76.9
Refused to answer	260	25.3	23.9	18.0	31.1
Have you imprisoned because of your drug use during the last 12 months?					
Yes, once	17	1.7	2.1	1.0	4.5
Yes, twice	1	0.1	0.1	0.0	0.9
No	748	72.7	73.6	66.5	79.7
Refused to answer	263	25.6	24.2	18.2	31.3
After your release from prison last time, when did you take a drug injection?					
In 1 day	174	16.9	17.7	14.2	21.8
In 2-15 days	207	20.1	20.8	15.8	27.0
In >15 days	118	11.5	11.9	9.6	14.7
Doesn't remember	115	11.2	11.4	8.5	15.1
Refused to answer	415	40.3	38.2	29.7	47.4
Within the last month how often have you consumed alcoholic beverages, such as beer, wine, vodka, other?					
Every day	127	6.3	7.1	4.2	11.8
More than once a week	332	16.6	16.5	13.0	20.8
Once a week	257	12.8	13.0	10.7	15.6
Rarely	692	34.5	32.8	28.0	38.0
Never	569	28.4	29.3	24.8	34.4
Other	7	0.3	0.3	0.1	0.9
Refused to answer	21	1.0	1.0	0.6	1.7

Table 1.3.2. History of drug use by RDS-MOD method

Characteristics	Descriptive statistics		RDS-MOD		
	N	%	%	95% CI	
				Lower	Upper
How old were you, when you first started using drugs?					
<15 years old	225	11.2	12.0	9.8	14.7
15-19 years old	1248	62.2	63.0	59.1	66.8
20-24 years old	396	19.7	19.1	16.4	22.0
≥25 years old	136	6.8	5.9	4.7	7.4
How old were you, when you first injected drug?					
<15 years old	55	2.7	2.7	1.9	3.9
15-19 years old	821	40.9	42.9	39.1	46.8
20-24 years old	749	37.3	37.1	33.6	40.8
≥25 years old	380	19.0	17.2	14.8	19.9
In your opinion, are you dependent on injection drugs?					
I am dependent	1420	70.8	73.2	67.5	78.3
I don't believe I'm dependent	516	25.7	23.5	18.9	28.8
No answer	69	3.4	3.3	2.0	5.3
During the last 5 years, have you received any of the following products and/or information free of charge?					
Brochures/flyer/booklets on AIDS	338	41.1	39.6	31.3	48.5
Qualified information on AIDS	308	37.5	36.4	28.4	45.2
Condoms	379	46.1	45.0	36.2	54.1
Syringe/needle/butterfly needle/spoon/alcohol pad	439	53.4	52.5	43.2	61.6
Other	59	7.2	6.5	4.3	9.8
Within the last 6 months, have you injected drugs with the same PWID (regular injecting group)?					
Yes	977	48.7	50.9	44.3	57.6
No, alone	518	25.8	23.3	19.5	27.5
No, with other PWID	481	24.0	24.4	19.5	29.8
Don't know	5	0.2	0.2	0.1	0.9
No answer	24	1.2	1.1	0.6	1.9
How many PWID are members of your regular injecting group?					
1	42	4.5	5.0	3.3	7.4
2	207	22.2	22.5	17.9	27.9
>2	682	73.3	72.5	65.9	78.3
CNS Depressants					
Used in the last month	826	41.2	42.9	34.5	51.7
Injected in the last month	51	2.5	2.3	1.4	3.6
Narcotic analgesics					
Used in the last month	734	36.6	37.7	33.0	42.7
Injected in the last month	1680	83.9	83.5	77.6	88.1
CNS Stimulants					
Used in the last month	120	6.0	6.3	4.5	8.8
Injected in the last month	535	26.7	28.3	22.3	35.2
Hallucinogens					
Used in the last month	1136	56.7	57.8	49.5	65.6
Injected in the last month	13	0.6	0.7	0.4	1.3

New psychoactive compounds					
Used in the last month	146	7.3	7.9	3.8	15.6
Injected in the last month	39	1.9	2.3	0.8	6.9
Other psychoactive compounds					
Used in the last month	7	0.3	0.4	0.2	0.9
Injected in the last month	0	0.0	-	-	-
If you recall, which opiates have you consumed/injected in the last 12 months?					
Codeine	44	2.2	2.4	1.3	4.3
Heroin	1096	54.7	58.7	51.1	65.9
Opium	160	8.0	8.2	5.8	11.6
Poppy	94	4.7	4.0	2.5	6.2
Methadone	732	36.5	35.6	29.8	41.8
Buprenorphine (Subutex, Suboxone)	1041	51.9	50.3	43.6	57.0
Morphine	101	5.0	5.8	3.7	8.9
Desomorphine ("Crocodile")	15	0.7	0.9	0.5	1.6
Tramadol	9	0.4	0.2	0.1	0.5
During the last 12 months, have you been consuming/injecting opiates in a continuous manner every day?					
Yes, for a month and over	568	28.3	29.5	25.6	33.8
Yes, more than one week and several times a year	291	14.5	15.1	12.1	18.6
No	1014	50.5	49.1	42.8	55.5
Don't remember	79	3.9	3.9	2.2	6.6
No response	53	2.6	2.4	1.3	4.4
If Yes, which one?					
Heroin	258	30.1	32.3	22.5	44.0
Subutex	80	9.3	8.7	5.0	14.7
Suboxone	248	28.9	27.4	21.0	34.8
Methadone	238	27.7	27.5	21.2	35.0
Other	34	4.0	4.1	2.5	6.6
During the last 12 months, have you had addiction withdrawal symptom (cold turkey symptoms) when you tried to stop drug usage or decreased dosage abruptly?					
I have never stopped injecting drugs	176	20.5	21.6	17.1	26.8
Yes	472	55.0	54.0	49.9	58.1
No	190	22.1	21.9	17.7	26.6
Don't remember	12	1.4	1.7	0.7	3.7
No response	8	0.9	0.9	0.4	2.1
During the last year, have you ever needed to use more drugs (increase the dosage) to achieve the same effect as you had at the start of drug use?					
Yes	497	57.9	61.0	54.9	66.8
No	323	37.6	34.3	28.7	40.5
Don't remember	28	3.3	3.5	1.6	7.6
No response	10	1.2	1.1	0.3	4.8
During the last 12 months, did you feel anxious or nervous when you realised that you should miss another dose?					
Yes	560	65.3	66.9	59.4	73.6
No	263	30.7	28.5	22.6	35.3
Don't remember	25	2.9	3.3	1.4	7.8

No response	10	1.2	1.3	0.2	6.4
During the last 12 months, have you used this drug to avoid withdrawal symptoms (cold turkey symptoms) or have you had withdrawal symptoms?					
Yes	688	80.2	80.9	76.2	84.9
No	134	15.6	14.6	11.4	18.5
Don't remember	22	2.6	2.9	1.5	5.6
No response	14	1.6	1.6	0.6	4.1
Within the last 12 months, have you been worried about the fact that you use opiates?					
Yes	614	71.6	71.7	60.7	80.6
No	178	20.7	19.9	15.3	25.4
No response	66	7.7	8.4	4.1	16.5
Within the last 12 months, was it hard for you to stop using drugs?					
Yes	433	50.5	53.5	45.8	61.0
No	50	5.8	4.9	3.4	6.9
I have never stopped using	354	41.3	39.2	32.1	46.8
No response	20	2.3	2.3	1.1	4.8
Within the last 12 months, have you spent lot of time/energy obtaining this drug or removing its effects?					
Yes	611	71.2	72.7	64.8	79.4
No	201	23.4	21.7	15.8	29.0
Don't remember	8	0.9	1.0	0.3	3.1
No response	38	4.4	4.6	2.3	8.9
When did you inject drugs last?					
Today	465	23.2	24.7	20.5	29.5
1 day ago	391	19.5	19.3	16.9	22.0
2 days ago	228	11.4	12.0	9.4	15.1
3-5 days ago	403	20.1	20.8	17.7	24.2
>5 days ago	484	24.1	21.7	16.8	27.5
Don't remember	24	1.2	1.1	0.6	2.1
No response	10	0.5	0.4	0.2	1.0
How many times did you take drugs that day?					
Once	1659	83.2	83.6	79.4	87.1
Twice	278	13.9	13.6	10.4	17.5
>2 times	37	1.9	1.9	1.2	2.9
Don't remember	10	0.5	0.5	0.2	1.0
No response	11	0.6	0.5	0.2	0.9
Which drug did you inject last time?					
Heroin	603	30.1	32.8	24.7	42.0
Ephedrone	93	4.6	4.6	2.5	8.3
Subutex	163	8.1	7.3	4.7	11.3
Suboxone	663	33.1	31.2	25.8	37.2
Methadone	259	12.9	12.6	10.0	15.8
Cocaine	8	0.4	0.3	0.1	0.8
Amphetamine	112	5.6	6.1	4.1	9.0
Other	77	3.8	3.9	2.7	5.5
No response	27	1.3	1.1	0.7	1.8
Within the last month, how often did you inject drugs?					
Once a month	104	5.2	4.8	2.7	8.3

Several times a month	649	32.4	31.7	27.6	36.2
Once a week	196	9.8	9.5	7.6	11.7
2-3 times a week	496	24.7	24.8	21.8	28.1
Once daily	400	19.9	20.4	16.3	25.1
Several times daily	123	6.1	6.7	5.3	8.4
Don't know	20	1.0	1.3	0.4	4.0
No response	17	0.8	0.9	0.2	3.5
During the last 12 months, have you injected drugs on the temporarily occupied territories of the country?					
Yes	12	0.6	0.5	0.2	1.0
No	1983	98.9	99.0	98.4	99.4
No response	10	0.5	0.4	0.2	0.9
Have you bought drugs while being on the temporarily occupied territories or bought drugs brought from temporarily occupied territories?					
Yes	49	2.4	2.5	1.6	3.9
No	1921	95.8	95.6	93.1	97.2
No response	35	1.7	1.9	0.9	3.9

Table 1.3.3. Drug use related risk behavior by RDS-MOD method

Characteristics	Descriptive statistics		RDS-MOD		
	N	%	%	95% CI	
				Lower	Upper
Have you ever used already used needle/syringe/other injection device?					
Yes, used by someone else	490	24.4	26.6	20.1	34.4
Yes, used by myself	808	40.3	43.2	35.6	51.2
No	889	44.4	41.1	35.3	47.2
Don't know	54	2.7	2.6	1.8	3.8
No response	27	1.4	1.5	0.8	2.8
Recall the last time you injected drugs, did you inject with a needle/syringe/other injection device used by someone else?					
Yes, I cleaned it	25	2.4	2.0	1.3	3.3
Yes, without cleaning	16	1.6	1.6	0.9	2.9
No	953	92.4	92.9	90.6	94.7
Don't know	9	0.9	0.7	0.3	2.1
No response	28	2.7	2.7	1.7	4.2
Recall the last time you injected drugs, did you inject with a needle/syringe/other injection device already used by yourself?					
Yes	153	14.8	13.1	9.7	17.5
No	824	79.9	81.3	76.6	85.3
Don't know	10	1.0	1.0	0.5	2.2
No response	44	4.3	4.6	3.4	6.2
The last time you injected, did you use used needle/syringe/other injection device that was left in the gathering place (where the drugs were prepared, flat or other place) by someone else or you?					
Yes, I cleaned it	24	10.0	10.3	5.1	19.5
Yes, without cleaning	9	3.8	2.5	1.2	4.8
No	133	55.4	52.2	41.0	63.3
Don't know	6	2.5	2.8	1.1	7.0
No response	68	28.3	32.2	21.9	44.7
The last time you injected, if there were many of you, how many people do you think shared needle/syringe/other injecting device?					
Nobody	407	39.5	40.3	31.7	49.5
1-4 people	50	4.8	4.4	2.9	6.6
I was alone	196	19.0	17.0	13.4	21.5
Don't know	291	28.2	29.8	23.5	37.0
No response	87	8.4	8.5	5.8	12.3
Recall the occasions you injected drugs during the last month. How often did you inject with the needle/syringe/other injection device used by others?					
Always	3	0.3	0.3	0.1	0.8
Almost always	3	0.3	0.1	0.0	0.4
Sometimes	32	3.1	3.2	2.0	4.9
Once	18	1.7	1.6	0.9	2.9
Never	897	87.0	87.5	84.1	90.2

Don't know	42	4.1	3.9	2.5	5.8
No response	36	3.5	3.5	2.4	5.2
Recall the occasions you injected drugs during the last month. How often did you inject with the needle/syringe/other injection device already used by yourself?					
Always	1	0.1	0.1	0.0	0.8
Almost always	19	1.8	1.8	0.9	3.4
Sometimes	246	23.9	23.0	18.7	28.1
Once	77	7.5	7.2	5.2	9.9
Never	638	61.9	63.2	56.8	69.1
Don't know	17	1.6	1.7	0.9	3.0
No response	33	3.2	3.0	1.9	4.6
If during the last month you used a needle/syringe/other injection device already used by yourself or someone else, how many times did you clean it before use?					
Always	224	64.2	64.2	52.5	74.5
Almost always	40	11.5	12.7	8.0	19.5
Sometimes	32	9.2	8.3	5.3	12.7
Once	29	8.3	7.9	4.3	13.8
Never	11	3.2	2.8	1.3	6.1
Don't know	12	3.4	3.8	1.9	7.5
No response	1	0.3	0.3	0.0	2.3
Have you used the needle/syringe/other injection device shared with the people I have listed at least once during the last month?					
Any member of the drug user group	30	36.1	34.3	19.9	52.2
Friend	20	24.1	19.8	9.9	35.7
Did you receive a clean syringe from the sources listed below during the last 30 days and did it already have a needle on it?					
Syringe and needle program					
I received	1063	53.0	52.9	43.6	62.1
I didn't receive	942	47.0	47.1	37.9	56.4
Pharmacy					
I received	1550	77.3	79.7	69.1	91.2
I didn't receive	455	22.7	20.3	15.9	25.4
Friend					
I received	368	18.4	18.6	14.6	23.8
I didn't receive	1637	81.6	81.4	77.3	84.9
The last time you threw away used needle/syringe/other injection device, how did you do this?					
I threw the needle in the garbage without the cap	104	5.2	5.2	3.3	8.2
I bent/broke the needle and threw it in the garbage	686	34.2	34.2	30.6	38.0
I threw the needle with the cap in the garbage	956	47.7	48.0	44.2	51.8
I put it in a bottle/jar/boiling pan and left it	59	2.9	3.1	2.0	4.8
I threw it on the ground	22	1.1	1.2	0.6	2.5
I burnt it in the oven	101	5.0	4.4	2.8	6.7
Other	53	2.6	2.8	1.9	4.1
No response	24	1.2	1.2	0.7	2.1
How often did you use a new, sterile needle/syringe/other injection device during the last month?					
Always	1578	78.7	78.0	71.6	83.3

Almost always	301	15.0	16.0	11.6	21.6
Sometimes	68	3.4	3.3	2.3	4.7
Never	18	0.9	0.6	0.3	1.2
Don't know	18	0.9	1.0	0.4	2.5
No response	22	1.1	1.0	0.6	1.7
Can you obtain new, sterile syringes and needles when necessary?					
Yes	1999	99.7	99.8	99.4	99.9
No	1	0	0.1	0.0	0.4
Don't know	1	0	0.1	0.0	0.5
No response	4	0.2	0.1	0.0	0.5
Where do you buy/obtain a new, sterile needle/syringe/other injection device?					
Pharmacy	1714	85.7	87.2	82.1	91.1
Other store	10	0.5	0.6	0.3	1.1
Hospital	11	0.6	0.7	0.3	1.5
Family/relatives	20	1.0	1.2	0.5	2.6
Sexual partner	6	0.3	0.3	0.1	0.8
Friends	392	19.6	19.2	15.9	22.9
Drug user	138	6.9	7.2	4.1	12.4
Drug dealer	50	2.5	2.3	1.4	3.9
Syringe and needle program	1151	57.6	56.1	45.9	65.9
Vending machine	14	0.7	0.7	0.4	1.4
How often did you use a pre-filled syringe during the last month?					
Always	22	1.1	1.1	0.7	1.8
Almost always	44	2.2	2.6	1.3	4.9
Sometimes	341	17.0	18.5	15.0	22.5
Once	161	8.0	8.9	6.9	11.2
Never	1373	68.4	65.8	59.0	72.0
Don't know	36	1.8	1.9	0.8	4.7
No response	28	1.4	1.3	0.8	2.2
The last time while injecting the drug, used a pre-filled syringe	438	21.8	23.9	18.4	30.4
The last time while injecting the drug, used the syringe that was filled with drug solution from the syringe used by someone else	62	3.1	3.4	2.4	4.9
The last time while injecting the drug, used the drug that was left in the syringe by someone else	33	1.6	1.4	0.9	2.2
The last time while injecting the drug, used a shared large bottle, spoon, boiling pan/glass/flask, cotton/filter, water that may have contained a needle/syringe used by someone else	395	19.7	21.0	15.6	27.6
The last time while injecting the drug, used the drug solution from the container, which had been prepared without his/her presence	400	20.0	22.7	18.8	27.1
Have you had an overdose in Georgia during the last year?					
Yes	202	10.1	10.4	8.4	12.9
No	1709	85.2	85.9	82.8	88.5
No response	94	4.7	3.7	2.5	5.5
Have you witnessed someone having an overdose in Georgia during the last year?					
Yes	511	25.5	27.7	23.8	31.9

No	1332	66.4	65.1	59.7	70.2
Don't remember	21	1.0	1.2	0.6	2.4
No response	141	7.0	5.9	4.5	7.8
Did the medical staff report this to the police?					
Yes	36	16.0	18.3	12.9	25.4
No	135	60.0	57.3	46.3	67.6
Don't know	20	8.9	8.5	4.2	16.5
No response	34	15.1	15.9	11.0	22.4

Table 1.3.4. History of sexual life by RDS-MOD method

Characteristics	Descriptive statistics		RDS-MOD		
	N	%	%	95% CI	
				Lower	Upper
How old were you when you had the first sexual contact?					
<18 years old	1518	75.7	74.6	67.7	80.5
≥18 years old	377	18.8	18.9	14.3	24.6
Never had one	2	0.1	0.1	0.0	0.3
Don't know	41	2.0	2.3	1.1	4.9
No response	67	3.3	4.1	2.0	8.0
Have you had sex with a partner of the opposite sex during the last 12 months?					
Yes	1650	84.7	85.0	82.1	87.4
No	267	13.7	13.4	11.2	15.9
No response	32	1.6	1.7	1.0	2.8
In total, how many partners of the opposite sex have you had sexual contact with during the last 12 months?					
1	820	49.8	49.4	44.7	54.1
2	255	15.5	16.1	14.1	18.3
>2	505	30.6	30.3	26.4	34.6
Don't know	46	2.8	2.8	1.7	4.6
No response	22	1.3	1.4	0.8	2.3
How many of those were "regular sexual partners"?					
0	176	10.6	10.3	8.1	13.1
1	1174	71.0	71.5	67.6	75.0
>1	193	11.7	11.7	8.6	15.7
Don't know	52	3.1	3.1	2.0	4.9
No response	59	3.6	3.4	2.3	5.0
How many of those were paid sexual partners during the last 12 months?					
0	1194	72.2	72.5	64.3	79.4
1	96	5.8	5.6	4.5	7.0
>1	143	8.6	8.9	5.8	13.5
Don't know	29	1.8	1.9	1.0	3.5
No response	192	11.6	11.1	6.3	18.9
Which was your last sexual partner?					
Regular	1287	77.8	78.8	74.0	83.0
Paid	104	6.3	6.3	4.0	9.8
Casual	217	13.2	12.7	10.5	15.4
Don't know	2	0.1	0.1	0.0	0.6
No response	35	2.1	2.1	1.1	3.9
Did you use condom during the last sexual contact?					
Yes	629	31.4	35.9	32.0	40.1
No	974	59.4	61.7	57.2	66.0
Don't know	12	0.7	0.8	0.4	1.6
No response	26	1.6	1.6	0.7	3.3
Were you or your sexual partner under the influence of drugs during the last sexual contact?					
Yes, I was	959	58.3	60.2	55.2	65.1
Yes, my sexual partner was	15	0.9	0.9	0.5	1.5
Yes, both me and my sexual partner were	48	2.9	3.0	2.0	4.6
No	515	31.3	29.1	24.1	34.6
Don't know	52	3.2	3.1	1.8	5.2
No response	56	3.4	3.7	2.0	6.8

Have you ever had a same-sex sexual partner?					
Yes	25	1.3	1.5	0.7	3.2
No	1898	97.6	97.2	95.0	98.4
No response	22	1.1	1.3	0.7	2.4
Have you had a same-sex sexual partner during the last 12 months? ***(Among those who have ever had a same-sex sexual partner)***					
Yes	8	32.0	33.4	9.5	70.4
No	10	40.0	37.9	18.6	62.0
No response	7	28.0	28.8	10.2	59.0
The last time you had sex with a same-sex sexual partner, did you use a condom? ***(Among those who have ever had a same-sex sexual partner)***					
Yes	9	36.0	38.6	16.8	66.2
No	8	32.0	34.3	15.5	59.6
No response	8	32.0	27.1	11.1	52.5
Have you had anal sex with any sexual partner during the last 12 months?					
Yes	131	6.5	6.9	4.5	10.5
No	1700	84.8	83.8	79.1	87.6
Don't know	3	0.1	0.2	0.1	0.6
No response	171	8.5	9.1	6.1	13.4
Did you use a condom during the last anal sex? ***(Among those who have had anal sex during the last 12 months)***					
Yes	61	46.6	47.0	31.1	63.5
No	54	41.2	39.4	25.0	55.8
Don't know	2	1.5	1.7	0.3	9.4
No response	14	10.7	11.9	6.6	20.7
During the last month have you had any problems obtaining condoms?					
Yes	38	1.9	1.9	1.2	2.7
No	1560	77.8	77.4	71.2	82.6
Don't know	27	1.3	1.2	0.6	2.4
No response	380	19.0	19.5	14.1	26.4

Table 1.3.5. Sexual behavior with different types of sexual partners by RDS-MOD method

Characteristics	Descriptive statistics		RDS-MOD		
	N	%	%	95% CI	
Regular sexual partner				Lower	Upper
Have you had sex with a regular sexual partner during the last 12 months?					
Yes	1439	74.1	74.6	71.2	77.7
No	504	25.9	25.4	22.3	28.8
How many times did you have a sexual contact with a regular sexual partner during the last month?					
Never had one	42	2.9	2.6	1.4	4.6
1-10 times	824	57.3	58.9	52.2	65.2
>10 times	184	12.8	13.2	10.1	17.1
Don't know	241	16.7	16.5	11.4	23.1
No response	148	10.3	8.9	6.3	12.6
The last time you had sex with your regular sexual partner, did you use a condom?					
Yes	422	29.3	26.6	21.7	32.2
No	977	67.9	70.5	64.2	76.0
Don't know	9	0.6	0.7	0.3	1.9
No response	31	2.2	2.2	1.3	3.7
Whose decision was it to use a condom during the last sexual contact with the regular sexual partner?					
Mine	83	19.7	21.8	16.9	27.7
Partner's	39	9.3	9.4	6.3	13.8
Common	293	69.6	66.8	59.6	73.3
Don't know	5	1.2	1.7	0.7	4.0
No response	1	0.2	0.3	0.0	2.1
How often have you used a condom with your regular sexual partner during the last year?					
Always	184	12.8	11.0	8.5	14.3
Almost always	165	11.5	11.2	8.5	14.5
Sometimes	446	31.0	32.8	26.9	39.3
Never	555	38.6	38.6	33.8	43.6
Don't know	25	1.7	1.8	0.9	3.4
No response	63	4.4	4.6	3.0	7.1
Does your regular sexual partner inject drugs?					
Yes	51	3.5	3.6	2.6	4.9
No	1284	89.3	89.0	84.9	92.1
Don't know	11	0.8	0.9	0.4	2.0
No response	92	6.4	6.4	3.8	10.8
Casual sexual partner					
Have you had a sexual contact with a casual sexual partner during the last 12 months?					
Yes	498	25.8	25.2	21.2	29.7
No	1432	74.2	74.8	70.3	78.8
How many times did you have a sexual contact with a casual sexual partner during the last month?					
0	70	14.1	13.6	9.2	19.6
1	180	36.1	37.2	30.9	44.0
>1	147	34.9	34.8	29.8	40.1
Don't know	45	9.0	9.5	6.2	14.2
No response	29	5.8	5.0	3.2	7.6

The last time you had a sexual contact with your casual sexual partner, did you use a condom?					
Yes	358	71.9	71.6	64.1	78.0
No	119	23.9	24.8	18.5	32.4
Don't know	7	1.4	1.5	0.5	4.3
No response	14	2.8	2.1	1.1	4.1
Whose decision was it to use a condom during the last sexual contact with the casual sexual partner?					
Mine	174	48.6	50.1	39.9	60.3
Partner's	21	5.9	6.1	3.6	10.1
Common	158	44.1	42.1	33.0	51.7
Don't know	2	0.6	0.8	0.2	3.2
No response	3	0.8	1.0	0.3	2.8
How often have you used a condom with your casual sexual partner during the last year?					
Always	231	46.4	45.1	33.8	56.8
Almost always	123	24.7	25.6	17.9	35.2
Sometimes	85	17.1	18.0	13.3	23.9
Never	44	8.8	8.5	5.1	13.8
Don't know	5	1.0	1.1	0.3	3.5
No response	10	2.0	1.8	0.8	4.3
Does your casual sexual partner inject drugs?					
Yes	31	6.2	7.0	4.4	11.1
No	225	45.2	44.0	33.8	54.6
Don't know	212	42.6	42.4	33.2	52.2
No response	30	6.0	6.6	3.2	13.4
Paid sexual partner					
Have you had paid sex during the last 12 months?					
Yes	238	12.3	12.2	7.9	18.2
No	1697	87.7	87.8	81.8	92.1
How many paid sexual partners have you had during the last month with whom you had sex in exchange for getting money or drugs?					
0	150	64.1	63.8	55.8	71.1
1	26	11.1	10.0	5.1	18.8
>1	8	3.4	2.9	0.9	8.3
Don't know	10	4.3	4.8	1.4	15.3
No response	40	17.1	18.6	13.5	24.9
How many paid sexual partners have you had during the last month to whom you paid money or gave drugs in exchange for sex?					
0	33	13.9	13.2	9.0	19.0
1	99	41.8	41.0	32.7	49.8
>1	80	33.8	35.2	27.5	43.6
Don't know	9	3.8	4.0	2.1	7.4
No response	16	6.8	6.7	3.6	11.9
How many times did you have sex with your last paid sexual partner during the last month?					
1	75	34.7	33.9	22.8	47.1
2	42	19.4	21.5	14.0	31.5
>2	27	12.5	13.1	9.6	17.6
Don't know	27	12.5	12.0	6.9	20.1
No response	45	20.8	19.5	14.8	25.1
The last time you had sex with your paid sexual partner, did you use a condom?					
Yes	211	88.7	89.7	86.1	92.5

No	21	8.8	7.4	4.3	12.3
Don't know	1	0.4	0.5	0.1	2.3
No response	5	2.1	2.5	1.0	6.1
Whose decision was it to use a condom during the last sexual contact with the paid sexual partner?					
Mine	68	32.2	27.7	16.1	43.4
Partner's	29	13.7	15.7	10.3	23.3
Common	98	46.4	47.4	39.3	55.6
Don't know	12	5.7	7.0	3.6	13.3
No response	4	1.9	2.1	0.9	4.9
How often have you used a condom with your paid sexual partner during the last 12 months?					
Always	140	58.8	58.0	50.5	65.2
Almost always	52	21.8	23.6	17.4	31.3
Sometimes	20	8.4	8.0	4.0	15.4
Never	10	4.2	3.3	1.2	8.6
Don't know	7	2.9	3.1	1.7	5.7
No response	9	3.8	3.9	2.2	6.9
Do(es) your paid sexual partner(s) inject drugs?					
Yes	29	12.2	13.2	9.2	18.5
No	76	31.9	32.6	26.3	39.5
Don't know	112	47.1	44.9	37.4	52.6
No response	21	8.8	9.4	6.0	14.3

Table 1.3.6. HBV and HCV test results by RDS-MOD method

Characteristics	Descriptive statistics		RDS-MOD		
	N	%	%	95% CI	
				Lower	Upper
HBV screening results					
Positive	51	2.5	2.5	1.6	3.9
Negative	1954	97.5	97.5	96.1	98.4
HCV RNA study result					
Positive	280	32.1	33.0	28.7	37.6
Negative	593	67.9	67.0	62.4	71.3
Are you vaccinated against HBV?					
Yes	151	7.5	7.4	5.8	9.5
No	1409	70.3	68.5	62.9	73.5
Don't know	429	21.4	23.2	18.4	28.9
No response	16	0.8	0.9	0.5	1.5
Where did you get your HBV vaccine?					
In hospital	96	4.8	4.8	3.5	6.5
In prison	31	1.5	1.5	0.8	2.8
Abroad	15	0.7	0.7	0.4	1.2
Don't know	2	0.1	0.1	0.0	0.3
No response	7	0.3	0.3	0.1	0.8
Missing	1854	92.5	92.5	90.4	94.2
Are you willing to get vaccinated against HBV?					
Yes	392	27.8	25.8	21.3	30.9
No	684	48.5	50.8	46.7	54.8
Don't know	312	22.1	21.6	17.8	26.0
No response	22	1.6	1.8	1.1	3.1

Table 1.3.7. Knowledge and Attitude towards HCV by RDS-MOD method

Characteristics	Descriptive statistics		RDS-MOD		
	N	%	%	95% CI	
				Lower	Upper
How can the risk of HCV infection be reduced?					
By vaccination	189	9.4	9.7	6.7	13.9
By using condoms	976	48.7	48.3	39.8	56.8
By not sharing used needle and syringe	1725	86.0	84.0	76.9	89.2
By not sharing injection device	1562	77.9	77.0	67.9	84.2
By not using non-sterile or used medical equipment	1268	63.2	59.3	52.2	66.0
Other	27	1.3	1.4	0.9	2.0
Don't know/Don't remember	69	3.4	3.4	1.8	6.5
No response	5	0.2	0.2	0.1	0.7
Do you know/have you heard about hepatitis C elimination program?					
Yes	1780	88.8	87.7	80.1	92.6
No	225	11.2	11.9	7.2	19.2
Where did you get information/hear about hepatitis C elimination program?					
At medical facility	447	25.1	27.0	19.8	35.7
At methadone substitution therapy center/department	136	7.6	8.8	5.5	13.8
At harm reduction service center	884	49.7	48.5	39.0	58.1
From TV	318	17.9	17.8	14.1	22.2
From internet	335	18.8	19.3	14.4	25.5
From friends/relatives	770	43.3	42.6	37.1	48.3
Do you know where you can take hepatitis C test?					
Yes	1777	88.6	88.8	83.3	92.7
No	120	6.0	6.0	3.9	9.2
Don't know/Don't remember	108	5.4	5.1	2.8	9.5
Have you ever taken hepatitis C test?					
Yes, during the last 2 years	1135	56.6	55.2	49.3	60.1
Yes, between the last 2-5 years period	471	23.5	24.6	21.5	27.9
Yes, 5 years ago	191	9.5	10.3	7.1	14.7
No	167	8.3	7.7	5.9	10.2
Don't know	22	1.1	1.2	0.6	2.2
No response	19	0.9	1.0	0.5	1.8
Have you ever taken medications to treat hepatitis C?					
Yes, during the last 2 years	226	12.3	11.4	9.0	14.3
Yes, between the last 2-5 years period	324	17.6	17.7	14.7	21.0
Yes, 5 years ago	217	11.8	12.4	8.9	16.9
No	1045	56.9	57.1	52.6	61.6
Don't know	3	0.2	0.2	0.0	0.5
No response	23	1.3	1.2	0.7	2.0
Why did you not get treatment for hepatitis C?					
I am not infected and don't need to treat	737	70.5	69.9	63.5	75.5
The treatment was not available	5	0.5	-	-	-
My doctor told me that the treatment was not necessary	90	8.6	8.5	6.2	11.6
It was very expensive	2	0.2	0.1	0.0	0.4
I heard that the treatment had many side effects	45	4.3	4.7	2.3	9.0
I had to go very far away to take the medicine and meet the doctor	3	0.3	0.2	0.0	0.8
I am in the waiting list	30	2.9	2.9	1.8	4.6
Other	86	8.2	8.4	6.3	11.1
Don't know	28	2.7	2.9	1.9	4.4

No response	3	0.3	0.3	0.1	1.0
Did you finish the treatment for hepatitis C or did you cease it before ending?					
I finished the treatment	677	85.4	85.4	81.9	88.3
I ceased it before ending	33	4.2	4.6	3.2	6.5
I am currently undergoing treatment	15	1.9	1.6	0.9	2.9
Don't know	1	0.1	0.1	0.0	1.3
No response	67	8.4	8.1	5.9	11.0
What was the reason for ceasing the treatment before ending?					
The side effects of the treatment	14	42.4	43.0	24.2	64.0
The treatment provider was far from me geographically	4	12.1	12.5	4.3	31.0
Stigma/Discrimination/Negative attitude of the medical facility/the doctor	1	3.0	3.0	0.3	20.2
Other	10	30.3	26.2	10.2	52.3
No response	4	12.1	15.1	5.4	35.6
Did you have a follow-up examination 12-24 weeks after the end of the treatment to find out if you have recovered or not?					
Yes	568	80.1	79.6	74.1	84.2
No	81	11.4	10.6	6.6	16.5
Don't know	41	5.8	6.6	3.3	12.8
No response	19	2.7	2.9	1.9	4.4
Did you recover as a result of the treatment for hepatitis C? (The analysis confirmed that the hepatitis C virus is no longer in the blood)					
Yes	588	82.8	83.2	79.6	86.4
No	22	3.1	2.7	1.6	4.5
Don't know	85	12.0	11.6	9.4	14.3
No response	15	2.1	2.3	1.3	4.0
Where do you prefer to receive services (testing, confirmation, treatment)?					
At the hepatitis C treatment medical facility in my city	1004	50.1	52.5	44.3	60.5
At the methadone substitution therapy center/department in my city	70	3.5	3.7	2.3	5.8
At the harm reduction service center (syringe and needle program) in my city	1031	51.4	47.7	37.9	57.6
At another service provider in my city	53	2.6	2.8	1.2	6.3

Table 1.3.8. Knowledge and Attitude towards HIV/AIDS and Self-evaluation of Risks by RDS-MOD method

Characteristics	Descriptive statistics		RDS-MOD		
	N	%	%	95% CI	
				Lower	Upper
Have you heard about HIV infection?					
Yes	1738	86.7	87.1	81.0	91.4
No	210	10.5	9.9	7.0	13.8
Don't know	53	2.6	2.8	1.1	6.7
No response	4	0.2	0.3	0.1	0.7
Do you know anyone around you who is infected with HIV, has AIDS or died of AIDS?					
Yes	862	43.8	44.9	39.6	50.3
No	1066	54.2	52.9	46.9	58.8
Don't know	38	1.9	2.2	1.2	4.1
No response	1	0.1	0.0	0.0	0.4
Do you have a close relative or a close friend who is infected with HIV, has AIDS or died of AIDS?					
Yes, close relative	74	8.6	8.9	7.0	11.2
Yes, close friend	303	35.2	36.1	30.0	42.7
No	291	33.8	30.8	23.5	39.2
Other	136	15.8	17.5	12.4	24.1
Don't know	10	1.2	1.4	0.6	3.1
No response	48	5.6	5.4	4.1	7.1
What do you think how high is your risk of infecting with HIV?					
High risk	110	5.6	5.8	3.6	9.1
Medium risk	507	25.8	26.8	22.7	31.3
Low risk	763	38.8	38.6	34.5	43.0
There is no risk	342	17.4	15.9	11.5	21.7
Don't know	185	9.4	9.7	6.9	13.4
No response	60	3.1	3.2	1.8	5.6
The risk of transmitting HIV infection (that causes AIDS) can be reduced by having one uninfected and devoted sexual partner	1733	88.1	87.8	83.4	91.1
The risk of transmitting HIV infection can be reduced by using condoms during each sexual contact	1810	92.0	92.3	89.2	94.5
A healthy-looking person can be infected with HIV that causes AIDS	1502	76.4	76.8	71.8	81.2
HIV infection can be transmitted as a result of a mosquito's bite	325	16.5	15.3	11.4	20.2
One can get infected by sharing food with a person infected with HIV	137	7.0	6.7	5.1	8.7
One can get infected with HIV by using a needle/syringe used by someone else	1826	92.8	92.2	85.4	96.0
One can get infected with HIV by using shared injection device (utensil, spoon, cotton/filter), or	1670	84.9	83.2	75.1	89.1

water previously touched by a needle/syringe used by someone else					
One can get infected with HIV by using the drug solution prepared without his/her presence from the container	1572	79.9	78.6	68.9	85.8
A drug user can protect oneself from getting infected by switching to noninjection drugs	1443	73.4	74.1	67.2	79.9
HIV infection can be transferred from HIV-infected mother to her fetus or child	1126	57.2	58.8	51.1	66.0
What do you think, is it possible to take a free and confidential test in your district (city) to reveal HIV-infection?					
Yes	1591	80.9	80.6	73.4	86.2
No	67	3.4	3.4	1.9	6.1
Don't know	274	13.9	14.4	10.1	20.0
No response	35	1.8	1.6	1.0	2.5
If you wish to take an HIV test, do you know where to apply?					
Yes	1757	89.3	88.7	82.8	92.8
No	150	7.6	7.7	4.5	13.0
Don't know	2	0.1	0.1	0.0	0.4
No response	58	2.9	3.4	1.7	6.6
Do you know where to apply to take a free HIV test?					
Yes	1651	94.0	94.2	90.3	96.6
No	53	3.0	2.9	1.5	5.7
Don't know	23	1.3	1.2	0.4	3.3
No response	30	1.7	1.7	1.1	2.4
I don't want to know the results, but have you ever taken an HIV test?					
Yes	1687	85.8	86.7	81.0	90.9
No	250	12.7	11.5	8.0	16.3
No response	30	1.5	1.8	0.9	3.5
When did you take the very last HIV test?					
Within the last year	752	44.6	36.9	30.6	43.6
Between the past 1-2 years period	469	27.8	26.9	21.5	33.0
2 years ago	389	23.1	31.9	25.1	39.7
Don't know	27	1.6	1.7	1.0	2.7
No response	49	2.9	2.7	2.1	3.5
Please tell me, was it your initiative to take the test or it was needed for the document/certificate?					
My initiative	1492	91.1	91.9	88.8	94.2
Certificate	57	3.5	3.6	2.4	5.2
I took the test in prison	23	1.4	1.4	0.6	3.1
Don't tell me the test result, but did you find it out?					
Yes	1588	96.9	97.7	96.0	98.7
No	15	0.9	1.0	0.5	1.9
No response	35	2.1	1.3	0.6	2.5
If by chance you were infected with HIV would you inform your spouse/regular sexual partner?					
Yes	1804	89.9	90.3	85.9	93.5
No	11	0.5	0.5	0.3	0.9

Don't know	95	4.7	4.9	3.3	7.3
No response	95	4.7	4.3	2.6	6.9
If by chance you were infected with HIV would you inform your IDU partners?					
Yes	1757	87.6	87.4	78.4	92.9
No	24	1.2	1.2	0.6	2.4
Don't know	111	5.5	5.9	3.5	9.9
No response	113	5.6	5.5	2.7	10.8
Will you take an HIV test if it is free and is held in a state/government facility?					
Yes	1470	73.3	72.7	64.8	79.4
No	213	10.6	11.1	6.7	17.9
Don't know	224	11.2	11.7	8.6	15.8
No response	98	4.9	4.5	3.2	6.2
If "No", why?					
I am afraid of the positive test result	1	0.5	-	-	-
I don't think it's necessary	75	35.2	34.2	20.4	51.4
I am afraid that the test results will be made public	54	25.4	24.7	13.9	40.1
They will find out that I am a drug user	43	20.2	21.1	14.0	30.5
I am afraid that the police will find out	7	3.3	3.5	1.3	8.8
Other	3	1.4	1.6	0.4	5.5
No response	30	14.1	14.8	8.7	24.1
From which of the below listed sources did you get information about HIV/AIDS?					
Radio	84	4.3	3.1	1.7	5.3
TV	851	43.3	43.1	36.0	50.6
Magazines/Journals	120	6.1	5.5	3.4	8.8
Booklets/Other printed information materials	278	14.1	12.3	9.4	15.9
Healthcare workers	321	16.3			
School/Teachers	35	1.8	1.8	1.0	3.3
Friends/Acquaintance/Relatives/Colleagues	1029	52.3	53.3	47.5	59.0
Non-governmental organizations (NGO) representatives/Social Workers	917	46.6	45.1	36.8	53.6
Billboards/Street Advertising	34	1.7	1.6	1.0	2.5
Internet	548	27.9	28.4	21.9	36.0
Other	34	1.7	1.6	1.0	2.6

Table 1.3.9. Use of prevention programs and social impact by RDS-MOD method

Characteristics	Descriptive statistics		RDS-MOD		
	N	%	%	95% CI	
				Lower	Upper
Has received the following products and/or information for free in Georgia during the last year					
Brochure/flyer/booklet on AIDS	768	39.6	38.2	31.0	46.0
Educational information on AIDS	711	36.6	35.9	28.7	43.8
Condoms	971	50.1	48.7	40.5	56.9
Syringe/needle/butterfly needle	1211	62.4	61.0	51.1	70.1
Does he/she know where to apply for the "syringes and needles program" in Georgia					
Yes	1519	77.2	77.0	65.4	85.5
No	436	22.2	22.4	13.9	34.0
No response	12	0.6	0.7	0.3	1.4
The place of drug injection					
Street	72	3.6	3.6	2.4	5.4
Apartment	1632	81.4	81.2	76.1	85.4
Automobile	344	17.2	17.0	14.4	20.0
Entrance hall	73	3.6	3.5	2.2	5.5
Non-residential space (garage, basement, attic, elevator, construction, abandoned house, ruins)	251	12.5	12.3	9.9	15.3
Open space (forest, riverbank, seashore)	128	6.4	6.3	4.8	8.3
The same place where I buy drugs	37	1.8	1.9	0.9	4.0
Wherever it is possible	267	13.3	14.9	11.2	19.5
Other	9	0.4	0.3	0.1	0.8
Coverage with the prevention programs					
Yes	930	53.7	47.7	39.2	56.2
No	802	43.6	52.3	43.8	60.8
Minimal coverage with the prevention programs					
Yes	1201	69.3	66.6	56.5	75.4
No	531	30.7	33.4	24.6	43.5
Complete coverage with the prevention programs					
Yes	609	35.2	34.5	27.2	42.7
No	1123	64.8	65.5	57.3	72.8
The two people who have the greatest impact on continuing drug use					
Nobody	1749	87.2	73.5	62.6	82.1
Needle partner	264	13.2	26.5	17.9	37.4
The two people who have the greatest impact on ceasing drug use					
Nobody	1152	57.5	60.1	55.4	64.6
Spouse/sexual partner	529	26.4	39.9	35.4	44.6

Table 1.3.1.0. Use of treatment programs by RDS-MOD method

Characteristics	Descriptive statistics		RDS-MOD		
	N	%	%	95%CI	
				Lower	Upper
Cessation of drug use without medical help					
Yes	501	25.0	23.6	20.0	27.6
No	1024	51.1	53.3	48.8	57.8
Had no "cold turkey symptoms"	344	17.2	17.0	12.6	22.7
Don't know	6	0.3	0.3	0.1	0.8
No response	130	6.5	5.7	4.2	7.7
Has ever been treated/received specific help for drug use					
Yes	749	37.4	40.0	33.8	46.7
No	1250	62.3	59.7	53.1	66.0
No response	6	0.3	0.3	0.1	0.9
Referral to a medical facility, specialized center, for treatment or specific help for drug use during the last 12 months					
Yes	546	72.2	72.2	66.8	77.0
No	197	26.1	25.6	21.2	30.6
No response	13	1.7	2.2	1.1	4.3
Receiving treatment/specific help for drug use during the last 12 months					
Currently undergoing treatment	440	78.7	78.9	73.8	83.2
Has undergone treatment during the last 12 months, but is not currently receiving treatment	90	16.1	15.8	12.2	20.1
No	15	2.7	2.3	1.2	4.3
No response	14	2.5	3.1	1.7	5.5
Types of treatment or specific help during the last 12 months					
Consultation	11	2.1	2.0	0.9	4.4
Self-help groups	0	0	0	0	0
Detoxification with methadone/suboxone	65	12.3	11.3	8.1	15.6
Substitution with methadone/suboxone	436	82.3	83.3	79.0	87.0
Detoxification with other drugs	8	1.5	1.4	0.6	3.0
Detoxification without drugs	14	2.6	2.9	1.7	4.7
Psycho-social rehabilitation	7	1.3	1.2	0.5	2.9
At home	3	0.6	0.7	0.2	1.9
The desire to receive other treatment or specific help during the last 12 months					
Yes (Wanted, but didn't/couldn't get it), detoxification	25	4.9	5.3	3.0	9.0
Yes (Wanted, but didn't/couldn't get it), substitution with methadone/suboxone	14	2.7	2.6	1.4	4.8
No	438	85.8	84.2	74.8	90.5
Doesn't know	13	2.5	3.0	1.2	7.5
No response	22	4.3	4.9	1.4	15.5
The reason why he/she did not/could not receive treatment or specific help during the last 12 months					
Had no desire	888	44.3	43.3	38.9	47.8

It is very expensive/Didn’t have enough money	216	10.8	9.7	7.1	13.2
Because of location	83	4.1	4.7	2.6	8.1
I applied, but there were not enough places	31	1.5	1.4	0.9	2.2
I applied, but the conditions (except the financial ones) were not satisfactory	15	0.7	0.6	0.3	1.2
Couldn't find good specialist/doctor	12	0.6	0.6	0.3	1.1
Don’t know	84	4.2	10.4	6.8	15.6
No response	23	1.1	3.0	1.3	6.8

Table B1.1. History of drug use

Characteristics	N	%
How old were you, when you first used drug?		
<15 years old	225	11.2
15-19 years old	1248	62.2
20-24 years old	396	19.7
≥25 years old	136	6.8
How old were you, when you first injected drug?		
<15 years old	55	2.7
15-19 years old	821	40.9
20-24 years old	749	37.3
≥25 years old	380	19.0
In your opinion, are you dependent on injection drugs?		
Yes, I am dependent	1420	70.8
No, I am not dependent	516	25.7
Refused to answer	69	3.4
During the last 5 years, have you received any of the following products and/or information free of charge?		
Brochures/fliers/booklets on HIV/AIDS	338	41.1
Qualified information on HIV/AIDS	308	37.5
Condoms	379	46.1
Syringe/needle/butterfly needle/spoon/alcohol pad	439	53.4
Other	59	7.2
Within the last 6 months, have you injected drugs with the same PWID (regular injecting group)?		
Yes	977	48.7
No, alone	518	25.8
No, with other PWID	481	24.0
Don't know	5	0.2
No answer	24	1.2
How many PWID are members of your regular injecting group?		
1	42	4.5
2	207	22.2
>2	682	73.3
If you recall, which drugs did you use within the last month and which ones did you inject?		
CNS depressants		
Babriturates		
Used in the last month	4	0.2
Injceted in the last month	1	0.0
Zopiclone (Imovane, Somnol, Som-neo, Drimolin, Sonorex, Nitress)		
Used in the last month	36	1.8
Injected in the last month	1	0.0
Zaleplon (Andante)		
Used in the last month	25	1.2
Injected in the last month	4	0.2
Diazepam (Valium, Relanium)		
Used in the last month	360	18.0
Injected in the last month	17	0.8

Used and injected in the last month	4	0.2
Reladorm		
Used in the last month	28	1.4
Clonazepam (Rivotril)		
Used in the last month	290	14.5
Injceted in the last month	7	0.3
Inhalants		
Used in the last month	3	0.1
Baclofen (Baclosan)		
Used in the last month	217	10.8
Injected and used in the last month	1	0.0
Gapapentin (Tebantin, Gabagamma, Rotaleptin, Grimodin, "Gabagiri")		
Used in the last month	204	10.2
Injected in the last month	1	0.0
Used and injected in the last month	1	0.0
Pregabalin (Lyrica, Helimon)		
Used in the last month	130	6.5
Injected in the last month	1	0.0
Narcotic analgesics		
Codeine		
Used in the last month	3	0.1
Injected in the last month	14	0.7
Used and injected in the last month	2	0.1
Heroin/"Siretsi"		
Used in the last month	93	4.6
Injected in the last month	936	46.7
Used and injected in the last month	19	0.9
Opium		
Used in the last month	7	0.7
Injected in the last month	94	4.7
Used and injected in the last month	1	0.0
Poppy		
Used in the last month	9	0.4
Injected in the last month	41	2.0
Methadone		
Used in the last month	371	18.5
Injected in the last month	272	13.6
Used and injected in the last month	116	5.8
Buprenorphine (Subutex, Suboxone)		
Used in the last month	174	8.7
Injected in the last month	795	39.7
Used and injected in the last month	61	3.0
Morphine		
Used in the last month	19	0.9
Injected in the last month	67	3.3
Used and injected in the last month	2	0.1
Desomorphine (Crocodile)		
Used and injected in the last month	1	0.0
Injected in the last month	17	0.8
Tramadol		
Used in the last month	2	0.1

Injected in the last month	4	0.2
CNS stimulants		
Cocaine (“Crack”)		
Used in the last month	9	0.4
Injected in the last month	12	0.6
Amphetamine		
Used in the last month	33	1.6
Injected in the last month	200	10.0
Used and injected in the last month	5	0.2
Ecstasy/MDMA		
Used in the last month	31	1.5
Injected in the last month	15	0.7
Metamphetamine (Vint)		
Used in the last month	27	1.3
Injected in the last month	192	9.6
Used and injected in the last month	2	0.1
Methcathinone (Jeff)		
Used in the last month	1	0.0
Injected in the last month	37	1.8
Used and injected in the last month	1	0.0
Ephedra (Tsitsvebi)		
Used in the last month	37	1.8
Injected in the last month	196	9.8
Used and injected in the last month	3	0.1
Hallucinogens		
Lysergic acid diethylamide (LSD)		
Used in the last month	23	1.1
Injected in the last month	4	0.2
Used and injected in the last month	1	0.0
Hemp (Marijuana, Hashish, Anasha)		
Used in the last month	1111	55.5
Injected in the last month	7	0.3
Used and injected in the last month	1	0.0
New psychoactive compounds		
Bio (Spice)		
Used in the last month	90	4.5
Injected in the last month	2	0.1
Bio- LSD, NBOMe		
Used in the last month	29	1.4
Injected in the last month	3	0.1
Used and injected in the last month	1	0.0
Crystal, Shower salt, Mephedrone		
Used in the last month	11	0.5
Injected in the last month	30	1.5
Used and injected in the last month	2	0.1
Bio MDMA		
Used in the last month	38	1.9
Injected in the last month	2	0.1
Other psychoactive compounds		
Tropicamide		
Used in the last month	2	0.1

Magitus		
Used in the last month	4	0.2
By groups:		
CNS Depressants		
Used in the last month	826	41.2
Injected in the last month	51	2.5
Narcotic analgesics		
Used in the last month	734	36.6
Injected in the last month	1680	83.9
CNS Stimulants		
Used in the last month	120	6.0
Injected in the last month	535	26.7
Hallucinogens		
Used in the last month	1136	56.7
Injected in the last month	13	0.6
New psychoactive compounds		
Used in the last month	146	7.3
Injected in the last month	39	1.9
Other psychoactive compounds		
Used in the last month	7	0.3
Injected in the last month	0	0.0
If you recall, which opiates have you consumed/injected in the last 12 months?		
Codeine	44	2.2
Heroin	1096	54.7
Opium	160	8.0
Poppy	94	4.7
Methadone	732	36.5
Buprenorphine (Subutex, Suboxone)	1041	51.9
Morphine	101	5.0
Desomorphine ("Crocodile")	15	0.7
Tramadol	9	0.4
During the last 12 months, have you been consuming/injecting opiates in a continuous manner every day?		
Yes, for a month and over	568	28.3
Yes, more than one week and several times a year	291	14.5
No	1014	50.5
Don't remember	79	3.9
No response	53	2.6
If Yes, which one?		
Heroin	258	30.1
Subutex	80	9.3
Suboxone	248	28.9
Methadone	238	27.7
Other	34	4.0
During the last 12 months, have you had addiction withdrawal symptom (cold turkey symptoms) when you tried to stop drug usage or decreased dosage abruptly?		
I have never stopped injecting drugs	176	20.5
Yes	472	55.0
No	190	22.1

Don't remember	12	1.4
No response	8	0.9
During the last year, have you ever needed to use more drugs (increase the dosage) to achieve the same effect as you had at the start of drug use?		
Yes	497	57.9
No	323	37.6
Don't remember	28	3.3
No response	10	1.2
During the last 12 months, did you feel anxious or nervous when you realised that you should miss another dose?		
Yes	560	65.3
No	263	30.7
Don't remember	25	2.9
No response	10	1.2
During the last 12 months, have you used this drug to avoid withdrawal symptoms (cold turkey symptoms) or have you had withdrawal symptoms?		
Yes	688	80.2
No	134	15.6
Don't remember	22	2.6
No response	14	1.6
During the last 12 months, have you been worried about the fact that you use opiates?		
Yes	614	71.6
No	178	20.7
No response	66	7.7
Within the last 12 months, was it hard for you to stop using drugs?		
Yes	433	50.5
No	50	5.8
I have never stopped using	354	41.3
No response	20	2.3
Within the last 12 months, have you spent lot of time/energy obtaining this drug or removing its effects?		
Yes	611	71.2
No	201	23.4
Don't remember	8	0.9
No response	38	4.4
When did you inject drugs last?		
Today	465	23.2
1 day ago	391	19.5
2 days ago	228	11.4
3-5 days ago	403	20.1
>5 days ago	484	24.1
Don't remember	24	1.2
No response	10	0.5
How many times did you take drugs that day?		
Once	1659	83.2
Twice	278	13.9
>2 times	37	1.9
Don't remember	10	0.5

No response	11	0.6
Which drug did you inject last time?		
Heroin	603	30.1
Ephedrone	93	4.6
Subutex	163	8.1
Suboxone	663	33.1
Methadone	259	12.9
Cocaine	8	0.4
Amphetamine	112	5.6
Other	77	3.8
No response	27	1.3
Within the last month, how often did you inject drugs?		
Once a month	104	5.2
Several times a month	649	32.4
Once a week	196	9.8
2-3 times a week	496	24.7
Once daily	400	19.9
Several times daily	123	6.1
Don't know	20	1.0
No response	17	0.8
During the last 12 months, have you injected drugs on the temporarily occupied territories of the country?		
Yes	12	0.6
No	1983	98.9
No response	10	0.5
Have you bought drugs while being on the temporarily occupied territories or bought drugs brought from temporarily occupied territories?		
Yes	49	2.4
No	1921	95.8
No response	35	1.7
Are you vaccinated for hepatitis B?		
Yes	151	7.5
No	1409	70.2
Don't know	429	21.4
No response	16	0.8
If yes, where did you get vaccinated for Hepatitis B?		
In hospital	96	63.6
In prison	31	20.5
Abroad	15	9.9
Don't know	2	1.3
No response	7	4.6
If no, are you willing to get hepatitis B vaccine?		
Yes	392	27.8
No	684	48.5
Don't know	312	22.1
No response	22	1.6

Table C1. Drug use related risk behavior

Characteristics	N	%
Have you ever used already used needle/syringe/other injection device?		
Yes, used by someone else	490	24.4
Yes, used by myself	808	40.3
No	889	44.4
Don't know	54	2.7
No response	27	1.4
Recall the last time you injected drugs, did you inject with a needle/syringe/other injection device used by someone else?		
Yes, I cleaned it	25	2.4
Yes, without cleaning	16	1.6
No	953	92.4
Don't know	9	0.9
No response	28	2.7
Recall the last time you injected drugs, did you inject with a needle/syringe/other injection device already used by yourself?		
Yes	153	14.8
No	824	79.9
Don't know	10	1.0
No response	44	4.3
The last time you injected, did you use used needle/syringe/other injection device that was left in the gathering place (where the drugs were prepared, flat or other place) by someone else or you?		
Yes, I cleaned it	24	10.0
Yes, without cleaning	9	3.8
No	133	55.4
Don't know	6	2.5
No response	68	28.3
PWID reporting the use of sterile injecting equipment the last time they injected		
All	1764	88.0
Disaggregated by gender		
Female	26	92.9
Male	1738	87.9
Disaggregated by age		
<25 years	54	90.0
≥25 years	1710	87.9
The last time you injected, if there were many of you, how many people do you think shared needle/syringe/other injecting device?		
Nobody	407	39.5
1-4 people	50	4.8
I was alone	196	19.0
Don't know	291	28.2
No response	87	8.4
Recall the occasions you injected drugs during the last month. How often did you inject with the needle/syringe/other injection device used by others?		
Always	3	0.3
Almost always	3	0.3
Sometimes	32	3.1

Once	18	1.7
Never	897	87.0
Don't know	42	4.1
No response	36	3.5
Recall the occasions you injected drugs during the last month. How often did you inject with the needle/syringe/other injection device already used by yourself?		
Always	1	0.1
Almost always	19	1.8
Sometimes	246	23.9
Once	77	7.5
Never	638	61.9
Don't know	17	1.6
No response	33	3.2
If during the last month you used a needle/syringe/other injection device already used by yourself or someone else, how many times did you clean it before use?		
Always	224	64.2
Almost always	40	11.5
Sometimes	32	9.2
Once	29	8.3
Never	11	3.2
Don't know	12	3.4
No response	1	0.3
If you cleaned it, how did you usually do it?		
With water	308	94.8
I boiled it	11	3.4
Other	9	0.5
Have you used the needle/syringe/other injection device shared with the people I have listed at least once during the last month?		
Your regular sexual partner	1	1.2
Any member of the drug user group	30	36.1
Friend	20	24.1
Did you receive a clean syringe from the sources listed below during the last 30 days and did it already have a needle on it?		
Syringe and needle program		
I received	1063	53.0
I didn't receive	942	47.0
Did it have a needle on it?		
It had	982	92.4
It didn't have	81	7.6
Pharmacy		
I received	1550	77.3
I didn't receive	455	22.7
Did it have a needle on it?		
It had	1438	92.8
It didn't have	112	7.2
Friend		
I received	368	18.4
I didn't receive	1637	81.6
Did it have a needle on it?		
It had	327	88.9
It didn't have	41	11.1

The last time you threw away used needle/syringe/other injection device, how did you do this?		
I threw the needle in the garbage without the cap	104	5.2
I bent/broke the needle and threw it in the garbage	686	34.2
I threw the needle with the cap in the garbage	956	47.7
I put it in a bottle/jar/boiling pan and left it	59	2.9
I threw it on the ground	22	1.1
I burnt it in the oven	101	5.0
Other	53	2.6
No response	24	1.2
How often did you use a new, sterile needle/syringe/other injection device during the last month?		
Always	1578	78.7
Almost always	301	15.0
Sometimes	68	3.4
Never	18	0.9
Don't know	18	0.9
No response	22	1.1
Can you obtain new, sterile syringes and needles when necessary?		
Yes	1999	99.7
No	1	0
Don't know	1	0
No response	4	0.2
Where do you buy/obtain a new, sterile needle/syringe/other injection device?		
Pharmacy	1714	85.7
Other store	10	0.5
Hospital	11	0.6
Family/relatives	20	1.0
Sexual partner	6	0.3
Friends	392	19.6
Drug user	138	6.9
Drug dealer	50	2.5
Syringe and needle program	1151	57.6
Vending machine	14	0.7
Other	3	0.2
How often did you use a pre-filled syringe during the last month?		
Always	22	1.1
Almost always	44	2.2
Sometimes	341	17.0
Once	161	8.0
Never	1373	68.4
Don't know	36	1.8
No response	28	1.4
The last time while injecting the drug, used a pre-filled syringe	438	21.8
The last time while injecting the drug, used the syringe that was filled with drug solution from the syringe used by someone else	62	3.1
The last time while injecting the drug, used the drug that was left in the syringe by someone else	33	1.6
The last time while injecting the drug, used a shared large bottle, spoon, boiling pan/glass/flask, cotton/filter, water that may have contained a needle/syringe used by someone else	395	19.7

The last time while injecting the drug, used the drug solution from the container, which had been prepared without his/her presence	400	20.0
Drug use practice in another country/city during the last year		
In another city of Georgia	329	16.4
In other countries	196	9.8
Have you had an overdose in Georgia during the last year?		
Yes	202	10.1
No	1709	85.2
No response	94	4.7
What kind of help did you get?		
Emergency aid on site	47	23.3
In-patient treatment	14	6.9
Friends gave me naloxone	87	43.1
Other	27	13.4
Have you witnessed someone having an overdose in Georgia during the last year?		
Yes	511	25.5
No	1332	66.4
Don't remember	21	1.0
No response	141	7.0
What kind of help did you provide?		
Emergency aid on site	99	19.4
In-patient treatment	12	2.3
We the friends gave him/her naloxone	322	63.0
Other	103	20.2
Did the medical staff report this to the police?		
Yes	36	16.0
No	135	60.0
Don't know	20	8.9
No response	34	15.1

Table C2.1. Drug use related risk behavior by cities

Characteristics	Tbilisi[1]		Gori		OR; 95% CI	*p*	Rustavi		OR; 95% CI	*p*
	N	%	N	%			N	%		
Has used needle/syringe/other injection device used by someone else	47	12.4	103	38.1	4.37 (2.95-6.47)	<0.001	58	21.5	1.94 (1.27-2.95)	<0.01
Has used needle/syringe/other injection device used by himself/herself	171	45.0	19	7.0	0.09 (0.06-0.15)	<0.001	107	39.6	0.80 (0.58-1.10)	0.17
The last time injected the drug with a needle/syringe/other injection device used by someone else	6	3.2	7	6.0	1.94 (0.64-5.92)	0.24	9	6.8	2.21 (0.77-6.38)	0.14
The last time injected the drug with a needle/syringe/other injection device used by himself/herself	44	23.3	11	9.4	0.34 (0.17-0.69)	<0.01	10	7.5	0.27 (0.13-0.55)	<0.001
During the last month used a needle/syringe/other injection device used by himself/herself	67	35.4	16	13.7	0.29 (0.16-0.53)	<0.001	28	21.1	0.49 (0.29-0.81)	<0.01
During the last month has always/sometimes cleaned needle/syringe/other injection device used by himself/herself before use	54	80.6	16	100.0	-	0.99	28	96.6	6.74 (0.84-54.20)	0.07
Has always/sometimes used a new, sterile needle/syringe/other injection device during the last month	373	98.2	263	97.4	0.70 (0.24-2.03)	0.52	269	99.6	5.05 (0.62-41.27)	0.13
Can obtain new, sterile syringes and needles when necessary	380	100.0	269	99.6	-	0.99	269	99.6	-	0.99
Buys a new, sterile needle/syringe at the pharmacy	341	89.7	204	75.8	0.36 (0.23-0.55)	<0.001	260	96.7	3.30 (1.57-6.94)	<0.01
Obtains a new, sterile needle/syringe from friends	50	13.2	49	18.2	1.47 (0.96-2.26)	0.08	40	14.9	1.15 (0.74-1.80)	0.53

Obtains a new, sterile needle/syringe from drug users	29	7.6	2	0.7	0.09 (0.02-0.38)	0.001	2	0.7	0.09 (0.02-0.38)	0.001
Obtains a new, sterile needle/syringe from the "syringe and needle program"	133	35.0	196	72.9	4.99 (3.54-7.02)	<0.001	117	43.5	1.43 (1.04-1.97)	0.03
Has always/sometimes used a pre-filled syringe (meaning a syringe that had been filled with the drug without his/her presence) during the last month	105	27.6	46	17.0	0.54 (0.36-0.79)	0.002	56	20.7	0.68 (0.47-0.99)	0.05
The last time while injecting the drug, used a pre-filled syringe	70	18.4	30	11.1	0.55 (0.35-0.88)	0.01	35	13.0	0.66 (0.42-1.02)	0.06
The last time while injecting the drug, used a shared large syringe, bottle, spoon, boiling pan/glass/flask, cotton/filter, water that may have contained a needle/syringe used by someone else	24	6.3	15	5.6	0.87 (0.45-1.70)	0.69	128	47.4	13.37 (8.29-21.55)	<0.001
The last time while injecting the drug, used the drug solution from the container, which had been prepared without his/her presence	94	24.7	25	9.3	0.31 (0.19-0.50)	<0.001	86	31.9	1.42 (1.01-2.01)	0.04
Had an overdose in Georgia during the last year	45	11.8	16	5.9	0.47 (0.26-0.85)	0.01	31	11.5	0.87 (0.59-1.57)	0.89
Witnessed an overdose incident in Georgia during the last year	106	27.9	47	17.4	0.55 (0.37-0.80)	<0.01	117	43.3	1.98 (1.42-2.75)	<0.001

Table C2.2. Drug use related risk behavior by cities

Characteristics	Tbilisi[1]		Telavi		OR; 95% CI	*p*	Batumi		OR; 95% CI	*p*
	N	%	N	%			N	%		
Has used needle/syringe/other injection device used by someone else	47	12.4	56	20.7	1.85 (1.21-2.83)	<0.01	26	9.6	0.75 (0.45-1.25)	0.28
Has used needle/syringe/other injection device used by himself/herself	171	45.0	77	28.5	0.49 (0.35-0.68)	<0.001	156	57.8	1.67 (1.22-2.29)	0.001
The last time injected the drug with a needle/syringe/other injection device used by someone else	6	3.2	4	4.1	1.31 (0.36-4.76)	0.68	3	1.7	0.52 (0.13-2.12)	0.36
The last time injected the drug with a needle/syringe/other injection device used by himself/herself	44	23.3	11	11.3	0.42 (0.21-0.86)	0.02	8	4.5	0.15 (0.07-0.34)	<0.001
During the last month used a needle/syringe/other injection device used by himself/herself	67	35.4	18	18.6	0.41 (0.23-0.75)	<0.01	68	38.2	1.13 (0.74-1.72)	0.58
During the last month has always/sometimes cleaned needle/syringe/other injection device used by himself/herself before use	54	80.6	16	84.2	1.28 (0.33-5.07)	0.72	70	98.6	16.85 (2.14-132.84)	<0.01
Has always/sometimes used a new, sterile needle/syringe/other injection device during the last month	373	98.2	257	95.2	0.37 (0.15-0.94)	0.04	264	97.8	0.83 (0.27-2.48)	0.73
Can obtain new, sterile syringes and needles when necessary	380	100.0	268	99.3	-	0.99	270	100.0	-	0.99

Buys a new, sterile needle/syringe at the pharmacy	341	89.7	152	56.7	0.15 (0.10-0.23)	<0.001	257	95.2	2.26 (1.18-4.32)	0.01
Obtains a new, sterile needle/syringe from friends	50	13.2	62	23.1	1.99 (1.32-2.99)	0.001	89	33.0	3.25 (2.19-4.80)	<0.001
Obtains a new, sterile needle/syringe from drug users	29	7.6	3	1.1	0.14 (0.04-0.45)	0.001	36	13.3	1.86 (1.11-3.12)	0.02
Obtains a new, sterile needle/syringe from the "syringe and needle program"	133	35.0	210	78.4	6.73 (4.70-9.63)	<0.001	178	65.9	3.59 (2.59-4.99)	<0.001
Has always/sometimes used a pre-filled syringe (meaning a syringe that had been filled with the drug without his/her presence) during the last month	105	27.6	42	15.6	0.48 (0.32-0.72)	<0.001	165	61.1	4.12 (2.95-5.74)	<0.001
The last time while injecting the drug, used a pre-filled syringe	70	18.4	34	12.6	0.64 (0.41-0.99)	0.04	161	59.6	6.54 (4.58-9.33)	<0.001
The last time while injecting the drug, used a shared large syringe, bottle, spoon, boiling pan/glass/flask, cotton/filter, water that may have contained a needle/syringe used by someone else	24	6.3	107	39.6	9.74 (6.03-15.74)	<0.001	44	16.3	2.89 (1.71-4.88)	<0.001
The last time while injecting the drug, used the drug solution from the container, which had been prepared without his/her presence	94	24.7	56	20.7	0.80 (0.55-1.16)	0.23	46	17.0	0.63 (0.42-0.93)	0.02
Had an overdose in Georgia during the last year	45	11.8	17	6.3	0.50 (0.28-0.89)	0.02	27	10.0	0.83 (0.50-1.37)	0.46
Witnessed an overdose incident in Georgia during the last year	106	27.9	51	18.9	0.60 (0.41-0.88)	<0.01	78	28.9	1.05 (0.74-1.48)	0.78

Table C2.3. Drug use related risk behavior by cities

Characteristics	Tbilisi[1]		Zugdidi		OR; 95% CI	*p*	Kutaisi		OR; 95% CI	*p*
	N	%	N	%			N	%		
Has used needle/syringe/other injection device used by someone else	47	12.4	54	19.6	1.73 (1.13-2.65)	0.01	147	54.4	8.47 (5.74-12.48)	<0.001
Has used needle/syringe/other injection device used by himself/herself	171	45.0	105	38.2	0.75 (0.55-1.04)	0.08	173	64.1	2.18 (1.58-3.00)	<0.001
The last time injected the drug with a needle/syringe/other injection device used by someone else	6	3.2	8	6.0	1.94 (0.66-5.72)	0.23	4	2.2	0.68 (0.19-2.46)	0.56
The last time injected the drug with a needle/syringe/other injection device used by himself/herself	44	23.3	38	28.4	1.30 (0.79-2.16)	0.30	31	16.9	0.67 (0.40-1.12)	0.13
During the last month used a needle/syringe/other injection device used by himself/herself	67	35.4	50	37.3	1.08 (0.68-1.72)	0.73	96	52.5	2.01 (1.33-3.05)	0.01
During the last month has always/sometimes cleaned needle/syringe/other injection device used by himself/herself before use	54	80.6	51	100.0	-	0.99	90	93.8	3.61 (1.30-10.06)	0.01
Has always/sometimes used a new, sterile needle/syringe/other injection device during the last month	373	98.2	272	98.9	1.70 (0.44-6.64)	0.44	249	92.2	0.22 (0.09-0.53)	0.001
Can obtain new, sterile syringes and needles when necessary	380	100.0	275	100.0	-	0.99	268	99.3	-	0.99

Buys a new, sterile needle/syringe at the pharmacy	341	89.7	249	90.5	1.09 (0.65-1.85)	0.73	251	93.7	1.69 (0.93-3.05)	0.08
Obtains a new, sterile needle/syringe from friends	50	13.2	39	14.2	1.09 (0.69-1.71)	0.70	63	23.5	2.03 (1.35-3.06)	0.001
Obtains a new, sterile needle/syringe from drug users	29	7.6	5	1.8	0.22 (0.08-0.59)	<0.01	61	22.8	3.57 (2.22-5.73)	<0.001
Obtains a new, sterile needle/syringe from the "syringe and needle program"	133	35.0	170	61.8	3.01 (2.18-4.15)	<0.001	147	54.9	2.26 (1.64-3.11)	<0.001
Has always/sometimes used a pre-filled syringe (meaning a syringe that had been filled with the drug without his/her presence) during the last month	105	27.6	54	19.6	0.64 (0.44-0.93)	0.02	100	37.0	1.54 (1.10-2.15)	0.01
The last time while injecting the drug, used a pre-filled syringe	70	18.4	36	13.1	0.67 (0.43-1.03)	0.07	72	26.7	1.61 (1.11-2.34)	0.01
The last time while injecting the drug, used a shared large syringe, bottle, spoon, boiling pan/glass/flask, cotton/filter, water that may have contained a needle/syringe used by someone else	24	6.3	15	5.5	0.86 (0.44-1.66)	0.65	62	23.0	4.42 (2.68-7.30)	<0.001
The last time while injecting the drug, used the drug solution from the container, which had been prepared without his/her presence	94	24.7	21	7.6	0.25 (0.15-0.42)	<0.001	72	26.7	1.12 (0.77-1.58)	0.58
Had an overdose in Georgia during the last year	45	11.8	39	14.2	1.23 (0.78-1.95)	0.38	27	10.0	0.83 (0.50-1.37)	0.46
Witnessed an overdose incident in Georgia during the last year	106	27.9	53	19.3	0.62 (0.42-0.90)	0.01	59	21.9	0.72 (0.50-1.04)	0.08

Table C3. Drug use related risk behavior by age

Characteristics	≤35 years old		>35 years old		OR; 95% CI	*p*
	N	%	N	%		
Has used needle/syringe/other injection device used by someone else	64	14.7	427	27.2	2.17 (1.63-2.89)	<0.001
Has used needle/syringe/other injection device used by himself/herself	148	34.0	660	42.0	1.41 (1.13-1.76)	<0.01
The last time injected the drug with a needle/syringe/other injection device used by someone else	10	5.8	31	3.6	0.61 (0.29-1.26)	0.18
The last time injected the drug with a needle/syringe/other injection device used by himself/herself	35	20.3	118	13.7	0.62 (0.41-0.95)	0.03
During the last month used a needle/syringe/other injection device used by himself/herself	84	48.8	259	30.2	0.45 (0.32-0.63)	<0.001
During the last month has always/sometimes cleaned needle/syringe/other injection device used by himself/herself before use	77	91.7	249	93.6	1.33 (0.53-3.32)	0.55
Has always/sometimes used a new, sterile needle/syringe/other injection device during the last month	415	95.4	1532	97.6	1.94 (1.12-3.37)	0.02
Can obtain new, sterile syringes and needles when necessary	434	99.8	1565	99.7	0.72 (0.08-6.19)	0.77
Buys a new, sterile needle/syringe at the pharmacy	393	90.6	1321	84.4	0.56 (0.40-0.80)	<0.01
Obtains a new, sterile needle/syringe from friends	91	21.0	301	19.2	0.90 (0.69-1.17)	0.42
Obtains a new, sterile needle/syringe from drug users	40	9.2	98	6.3	0.66 (0.45-0.97)	0.03
Obtains a new, sterile needle/syringe from the "syringe and needle program"	229	52.8	922	58.9	1.28 (1.04-1.59)	0.02
Has always/sometimes used a pre-filled syringe (meaning a syringe that had been filled with the drug without his/her presence) during the last month	165	29.9	403	25.7	0.56 (0.45-0.70)	<0.001
The last time while injecting the drug, used a pre-filled syringe	138	31.7	300	19.1	0.51 (0.40-0.65)	<0.001
The last time while injecting the drug, used a shared large bottle, spoon, boiling pan/glass/flask, cotton/filter, water that may have contained a needle/syringe used by someone else	102	23.4	293	18.7	0.75 (0.58-0.97)	0.03
The last time while injecting the drug, used the drug solution from the container, which had been prepared without his/her presence	100	23.0	300	19.1	0.79 (0.61-1.02)	0.07
Had an overdose in Georgia during the last year	56	12.9	146	9.3	0.69 (0.50-0.96)	0.03
Witnessed an overdose incident in Georgia during the last year	134	30.8	377	24.0	0.71 (0.56-0.90)	<0.01

Table C4. Drug use related risk behavior by alcohol consumption

Characteristics	Seldom consumes/Does not consume alcohol		Alcohol consumer		OR; 95% CI	*p*
	N	%	N	%		
Has used needle/syringe/other injection device used by someone else	280	21.7	211	29.5	1.51 (1.22-185)	<0.001
Has used needle/syringe/other injection device used by himself/herself	516	40.0	292	40.8	1.03 (0.86-1.24)	0.74
The last time injected the drug with a needle/syringe/other injection device used by someone else	24	3.6	17	4.6	1.27 (0.67-2.39)	0.46
The last time injected the drug with a needle/syringe/other injection device used by himself/herself	99	15.0	54	14.5	0.96 (0.67-1.37)	0.83
During the last month used a needle/syringe/other injection device used by himself/herself	201	30.5	142	38.2	1.41 (1.08-1.84)	0.01
During the last month has always/sometimes cleaned needle/syringe/other injection device used by himself/herself before use	194	96.0	131	89.1	0.34 (0.14-0.81)	0.02
Has always/sometimes used a new, sterile needle/syringe/other injection device during the last month	1256	97.4	691	96.5	0.73 (0.43-1.23)	0.23
Can obtain new, sterile syringes and needles when necessary	1287	99.8	712	99.4	0.28 (0.05-1.51)	0.11
Buys a new, sterile needle/syringe at the pharmacy	1098	85.3	616	86.5	1.10 (0.85-1.44)	0.46
Obtains a new, sterile needle/syringe from friends	233	18.1	159	22.3	1.30 (1.04-1.63)	0.02
Obtains a new, sterile needle/syringe from drug users	62	4.8	76	10.7	2.36 (1.67-3.35)	<0.001
Obtains a new, sterile needle/syringe from the "syringe and needle program"	753	58.5	398	55.9	0.90 (0.75-1.08)	0.26
Has always/sometimes used a pre-filled syringe (meaning a syringe that had been filled with the drug without his/her presence) during the last month	360	27.9	208	29.1	1.06 (0.86-1.29)	0.59
The last time while injecting the drug, used a pre-filled syringe	291	22.6	147	20.5	0.89 (0.71-1.11)	0.29
The last time while injecting the drug, used a shared large syringe, bottle, spoon, boiling pan/glass/flask, cotton/filter, water that may have contained a needle/syringe used by someone else	245	19.0	150	20.9	1.13 (0.90-1.42)	0.29
The last time while injecting the drug, used the drug solution from the container, which had been prepared without his/her presence	250	19.4	150	20.9	1.10 (0.88-1.38)	0.40
Had an overdose in Georgia during the last year	136	10.6	66	9.2	0.86 (0.63-1.17)	0.34
Witnessed an overdose incident in Georgia during the last year	3265	25.2	186	26.0	1.04 (0.85-1.28)	0.71

Table C5. Drug use related risk behavior by undergoing the needle and syringe program

Characteristics	Individuals who use the needle and syringe program		Individuals who do not use a needle and syringe program		OR; 95% CI	*p*
	N	%	N	%		
Has used needle/syringe/other injection device used by someone else	281	26.4	210	22.3	0.79 (0.65-0.98)	0.03
Has used needle/syringe/other injection device used by himself/herself	421	39.6	387	41.1	1.06 (0.89-1.27)	0.50
The last time injected the drug with a needle/syringe/other injection device used by someone else	18	3.1	23	5.0	1.64 (0.87-3.07)	0.12
The last time injected the drug with a needle/syringe/other injection device used by himself/herself	55	9.6	98	21.4	2.58 (1.80-3.68)	<0.001
During the last month used a needle/syringe/other injection device used by himself/herself	174	30.3	169	37.0	1.35 (1.04-1.75)	0.02
During the last month has always/sometimes cleaned needle/syringe/other injection device used by himself/herself before use	165	92.7	160	93.6	1.15 (0.50-2.63)	0.75
Has always/sometimes used a new, sterile needle/syringe/other injection device during the last month	1036	97.5	911	96.7	0.77 (0.45-1.29)	0.32
The last time while injecting the drug, used a pre-filled syringe	228	21.4	210	22.3	1.05 (0.85-1.30)	0.65
The last time while injecting the drug, used a shared large syringe, bottle, spoon, boiling pan/glass/flask, cotton/filter, water that may have contained a needle/syringe used by someone else	166	15.6	229	24.3	1.74 (1.39-2.17)	<0.001
The last time while injecting the drug, used the drug solution from the container, which had been prepared without his/her presence	198	18.6	202	21.4	1.19 (0.96-1.48)	0.12
Had an overdose in Georgia during the last year	111	10.4	91	9.7	0.92 (0.68-1.23)	0.56
Witnessed an overdose incident in Georgia during the last year	285	26.8	226	24.0	0.86 (0.70-1.05)	0.15
Participants who undergo substitution therapy	236	22.2	200	21.2	0.94 (0.76-1.17)	0.60

Table D1. History of sexual life

Characteristics	N	%
How old were you when you had the first sexual intercourse?		
<18 years old	1518	75.7
≥18 years old	377	18.8
Never had it	2	0.1
Don't know	41	2.0
No response	67	3.3
Mean age of beginning sexual life (min-max)	16 (13-33)	
Median age of beginning sexual life	16	
Have you had sexual intercourse with partner of the opposite sex during the last 12 months?		
Yes	1650	84.7
No	267	13.7
No response	32	1.6
In total, with how many sexual partners of the opposite sex have you had during the last 12 months?		
1	820	49.8
2	255	15.5
>2	505	30.6
Don't know	46	2.8
No response	22	1.3
How many of those were regular sexual partners?		
0	176	10.6
1	1174	71.0
>1	193	11.7
Don't know	52	3.1
No response	59	3.6
How many of those were paid sexual partners?		
0	1194	72.2
1	96	5.8
>1	143	8.6
Don't know	29	1.8
No response	192	11.6
Which was your last sexual partner?		
Regular	1287	77.8
Paid	104	6.3
Casual	217	13.2
Don't know	2	0.1
No response	35	2.1
Did you use condom during the last sexual intercourse?		
Yes	629	31.4
No	974	59.4
Don't know	12	0.7
No response	26	1.6
Were you or your sexual partner under the influence of drugs during the last sexual intercourse?		
Yes, I was	959	58.3
Yes, my sexual partner was	15	0.9
Yes, both me and my sexual partner were	48	2.9
No	515	31.3
Don't know	52	3.2
No response	56	3.4
Have you ever had same-sex sexual partner?		

Yes	25	1.3
No	1898	97.6
No response	22	1.1
Have you had same-sex sexual partner during the last 12 months? *(Among those who ever had same-sex sexual partner)*		
Yes	8	32.0
No	10	40.0
No response	7	28.0
The last time you had sex with a same-sex sexual partner, did you use condom? *(Among those who ever had same-sex sexual partner)*		
Yes	9	36.0
No	8	32.0
No response	8	32.0
Have you had sexual contact with same-sex partner in exchange for drugs? *(Among those who ever had a same-sex sexual partner)*		
Yes	1	4.0
No	8	32.0
No response	16	64.0
Have you had anal sex with any sexual partner during the last 12 months?		
Yes	131	6.5
No	1700	84.8
Don't know	3	0.1
No response	171	8.5
Did you use condom during the last anal sex? *(Among those who had anal sex during the last 12 months)*		
Yes	61	46.6
No	54	41.2
Don't know	2	1.5
No response	14	10.7
Have you had any problem(s) obtaining condoms during the last month?		
Yes	38	1.9
No	1560	77.8
Don't know	27	1.3
No response	380	19.0

Table E1. Sexual behavior with different types of sexual partners

Characteristics	N	%
Regular sexual partner		
Have you had sex with regular sexual partner during the last 12 months?		
Yes	1439	74.1
No	504	25.9
How many times did you have sexual intercourse with regular sexual partner during the last month?		
Never had it	42	2.9
1-10 times	824	57.3
>10 times	184	12.8
Don't know	241	16.7
No response	148	10.3
The last time you had sex with your regular sexual partner, did you use condom?		
Yes	422	29.3
No	977	67.9
Don't know	9	0.6
No response	31	2.2
Whose decision was to use condom during the last sexual intercourse with your regular sexual partner?		
My decision	83	19.7
Partner's decision	39	9.3
Shared decision	293	69.6
Don't know	5	1.2
No response	1	0.2
Why you or your regular sexual partner didn't use condom during the last sex?		
Was not available/Did not have it	14	1.4
It is too expensive	1	0.1
The partner refused	16	1.6
Don't like it	199	20.4
The partner uses other contraceptives	18	1.8
Don't think it was necessary	606	62.2
Didn't think of that	88	9.0
How often have you used condom with your regular sexual partner during the last year?		
Always	184	12.8
Almost always	165	11.5
Sometimes	446	31.0
Never	555	38.6
Don't know	25	1.7
No response	63	4.4
Does your regular sexual partner inject drugs?		
Yes	51	3.5
No	1284	89.3
Don't know	11	0.8
No response	92	6.4
Casual sexual partner		
Have you had sex with casual sexual partner during the last 12 months?		

Yes	498	25.8
No	1432	74.2
How many times did you have sex with casual sexual partner during the last month?		
0	70	14.1
1	180	36.1
>1	147	34.9
Don't know	45	9.0
No response	29	5.8
The last time you had sex with your casual sexual partner, did you use condom?		
Yes	358	71.9
No	119	23.9
Don't know	7	1.4
No response	14	2.8
Whose decision was to use condom during the last sex with casual sexual partner?		
My decision	174	48.6
Partner's decision	21	5.9
Shared decision	158	44.1
Don't know	2	0.6
No response	3	0.8
Why you and your casual sexual partner didn't use condom during the last sex?		
Was not available/Did not have it	30	25.2
The partner refused	4	3.4
I don't like using condoms	38	31.9
I don't like the quality of the condoms	2	1.7
Don't think it was necessary	29	24.4
Didn't think of that	14	11.8
How often have you used condom with casual sexual partner(s) during the last year?		
Always	231	46.4
Almost always	123	24.7
Sometimes	85	17.1
Never	44	8.8
Don't know	5	1.0
No response	10	2.0
Does your casual sexual partner inject drugs?		
Yes	31	6.2
No	225	45.2
Don't know	212	42.6
No response	30	6.0
Paid sexual partner		
Have you had paid sex during the last 12 months?		
Yes	238	12.3
No	1697	87.7
How many paid sexual partners have you had during the last month from whom you got money or drugs in exchange for sex?		
0	150	64.1
1	26	11.1
>1	8	3.4

Don’t know	10	4.3
No response	40	17.1
How many paid sexual partners have you had during the last month to whom you paid money or gave drugs in exchange for sex?		
0	33	13.9
1	99	41.8
>1	80	33.8
Don’t know	9	3.8
No response	16	6.8
How many times did you have sex with your last paid sexual partner during the last month?		
1	75	34.7
2	42	19.4
>2	27	12.5
Don’t know	27	12.5
No response	45	20.8
The last time you had sex with your paid sexual partner, did you use condom?		
Yes	211	88.7
No	21	8.8
Don’t know	1	0.4
No response	5	2.1
Whose decision was to use condom during last sex with paid sexual partner?		
My decision	68	32.2
Partner’s decision	29	13.7
Shared decision	98	46.4
Don’t know	12	5.7
No response	4	1.9
Why you and your paid sexual partner didn’t use condom during the last sex?		
The partner refused	1	4.8
Don't like it	5	23.8
Don't think it was necessary	9	42.9
Didn't think of that	4	19.0
Other	1	4.8
How often have you used condom with your paid sexual partner during the last 12 months?		
Always	140	58.8
Almost always	52	21.8
Sometimes	20	8.4
Never	10	4.2
Don’t know	7	2.9
No response	9	3.8
Do(es) your paid sexual partner(s) inject drugs?		
Yes	29	12.2
No	76	31.9
Don’t know	112	47.1
No response	21	8.8
Having casual or paid sexual partners among married PWID during the last 12 months		
Had casual sexual partner	177	18.7
Had paid sexual partner	54	5.7

Table E2. Sexual behaviour by cities

Characteristics	Tbilisi [4]		Gori		OR; 95% CI	*p*	Rustavi		OR; 95% CI	*p*
	N	%	N	%				%		
History of sexual life										
Had sexual intercourse with opposite-sex partner during the last 12 months	335	88.4	158	73.1	0.3 (0.2-0.5)	<0.0001	230	85.2	0.7 (0.4-1.2)	0.2
Condom use during the last sexual intercourse										
Used condom during the last sexual intercourse	152	45.5	53	34.0	0.6 (0.4-0.9)	0.02	53	23.6	0.3 (0.2-0.5)	<0.0001
Regular sexual partner during the last 12 months										
Had sex with regular sexual partner during the last 12 months	295	78.2	143	66.5	0.5 (0.3-0.8)	0.002	210	77.8	0.9 (0.6-1.4)	0.9
Used condom with regular sexual partner during the last sexual intercourse	106	35.9	36	25.2	0.6 (0.4-0.9)	0.02	36	17.1	0.3 (0.2-0.5)	<0.0001
Never used condom with regular sexual partner during the last 12 months	116	39.3	77	53.8	1.8 (1.2-2.7)	0.004	104	49.5	1.5 (1.0-2.1)	0.023
Regular sexual partner injects drugs	7	2.4	6	4.2	1.8 (0.6-5.4)	0.3	8	3.2	1.6 (0.5-4.5)	0.3
Casual sexual partner(s) during the last 12 months										
Had casual sexual partner during the last 12 months	110	29.9	21	9.9	0.2 (0.1-0.4)	<0.0001	42	15.6	0.4 (0.2-0.6)	<0.0001
Used condom during the last casual sexual intercourse	90	81.8	12	57.1	0.2 (0.1-0.7)	0.01	28	66.7	0.5 (0.2-1.3)	0.2
Never used condom with casual sexual partner during the last 12 months	12	10.9	6	28.6	3.2 (1.0-10.0)	0.04	8	19.0	1.9 (0.7-5.1)	0.2
Casual sexual partner injects drugs	7	6.4	0	0	-	-	10	23.8	4.5 (1.6-13.0)	0.004
Paid sexual partner(s) during the last 12 months										

[4] Tbilisi acts as a reference group

Had paid sexual partner during the last 12 months	32	8.5	12	5.6	0.6 (0.3-1.2)	0.2	15	5.6	0.6 (0.3-1.2)	0.16
Used condom during the last paid sexual intercourse	28	87.5	10	83.3	0.7 (0.1-4.5)	0.7	13	86.7	0.9 (0.1-5.7)	0.9
Never used condom with paid sexual partner during the last 12 months	3	9.4	1	8.3	0.8 (0.08-9.3)	0.9	2	13.3	1.4 (0.2-10.0)	0.7
Paid sexual partner injects drugs	5	15.6	0	0	-	-	1	6.7	0.4 (0.04-3.6)	0.4
Homosexual contacts										
Ever had sexual partner of the same sex	2	0.5	0	0	-	-	2	0.7	1.4 (0.2-10.0)	0.7
Used condom during the last homosexual contact	1	50.0	0	0	-	-	0	0	-	-
Anal sex practice during the last 12 months										
Had anal sex with any sexual partner during the last 12 months	10	2.6	12	4.4	1.7 (0.7-4.0)	0.2	17	6.3	2.4 (1.1-5.5)	0.02
Used condom during the last anal sex	5	50.0	7	58.3	1.4 (0.2-7.5)	0.7	10	58.8	1.4 (0.3-6.8)	0.6
Access to condoms										
Had any problem with obtaining condoms	4	1.1	2	0.7	0.7 (0.1-3.8)	0.7	11	4.1	4.0 (1.2-12.6)	0.02

Table E2. Sexual behaviour by cities

Characteristics	Tbilisi [1]		Telavi		OR; 95% CI	*p*	Batumi		OR; 95% CI	*p*
	N	%	N	%				%		
History of sexual life										
Had sexual intercourse with opposite-sex partner during the last 12 months	335	88.4	236	87.7	0.9 (0.6-1.5)	0.8	235	87.0	0.9 (0.5-1.4)	0.6
Condom use during the last sexual intercourse										
Used condom during the last sexual intercourse	152	45.5	105	44.7	0.9 (0.7-1.3)	0.8	71	30.2	0.5 (0.3-0.7)	<0.001
Regular sexual partner during the last 12 months										
Had sex with regular sexual partner during the last 12 months	295	78.2	201	75.0	0.8 (0.5-1.2)	0.3	215	79.6	1.1 (0.7-1.6)	0.6
Used condom with regular sexual partner during the last sexual intercourse	106	35.9	84	41.8	1.2 (0.8-1.8)	0.18	41	19.1	0.4 (0.2-0.6)	<0.0001
Never used condom with regular sexual partner during the last 12 months	116	39.3	99	49.5	1.5 (1.0-2.1)	0.02	24	11.2	0.2 (0.1-0.3)	<0.0001
Regular sexual partner injects drugs	7	2.4	12	6.0	2.6 (1.0-6.8)	0.04	8	3.7	1.6 (0.6-4.4)	0.3
Casual sexual partner(s) during the last 12 months										
Had casual sexual partner during the last 12 months	110	29.9	65	24.2	0.7 (0.5-1.0)	0.11	105	39.0	1.5 (1.0-2.0)	0.016
Used condom during the last casual sexual intercourse	90	81.8	41	63.1	0.4 (0.2-0.8)	0.01	85	81.0	1.1 (0.5-2.4)	0.7
Never used condom with casual sexual partner during the last 12 months	12	10.9	10	15.4	1.4 (0.6-3.6)	0.4	2	1.9	0.1 (0.03-0.7)	0.02
Casual sexual partner injects drugs	7	6.4	1	1.5	0.2 (0.03-1.9)	0.17	2	1.9	0.3 (0.05-1.4)	0.12
Paid sexual partner(s) during the last 12 months										

Had paid sexual partner during the last 12 months	32	8.5	34	12.7	1.5 (0.9-2.6)	0.08	31	11.6	1.4 (0.8-2.3)	0.2
Used condom during the last paid sexual intercourse	28	87.5	27	79.4	0.5 (0.1-2.1)	0.4	29	93.5	2.0 (0.3-12.2)	0.4
Never used condom with paid sexual partner during the last 12 months	3	9.4	4	11.8	1.3 (0.2-6.2)	0.7	0	0	-	-
Paid sexual partner injects drugs	5	15.6	4	11.8	0.7 (0.1-2.9)	0.6	3	9.7	0.5 (0.1-2.6)	0.5
Homosexual contact										
Ever had sexual partner of the same sex	2	0.5	1	0.4	0.7 (0.06-7.7)	0.7	19	17.0	14.7 (3.4-63.9)	<0.0001
Used condom during the last homosexual contact	1	50.0	0	0	-	-	8	42.1	0.7 (0.4-13.4)	0.7
Anal sex practice during the last 12 mo										
Had anal sex with any sexual partner during the last 12 months	10	2.6	7	2.6	0.9 (0.3-2.6)	0.9	76	28.1	14.4 (7.3-28.6)	<0.0001
Access to condoms										
Had any problem with obtaining condoms	4	1.1	9	3.3	3.2 (1.0-10.6)	0.05	5	1.9	1.7 (0.4-6.6)	0.4

Table E2. Sexual behaviour by cities

Characteristics	Tbilisi [1]		Zugdidi		OR; 95% CI	*p*	Kutaisi		OR; 95% CI	*p*
	N	%	N	%				%		
History of sexual life										
Had sexual intercourse with opposite-sex partner during the last 12 months	335	88.4	225	81.8	0.6 (0.4-0.9)	0.02	231	85.6	0.7 (0.5-1.2)	0.3
Condom use during the last sexual intercourse										
Used condom during the last sexual intercourse	152	45.5	120	53.3	1.3 (0.9-1.9)	0.07	75	32.5	0.5 (0.4-0.8)	0.002
Regular sexual partner during the last 12 months										
Had sex with regular sexual partner during last the 12 months	295	78.2	205	74.8	0.8 (0.5-1.2)	0.3	170	63.2	0.4 (0.3-0.6)	<0.0001
Used condom with regular sexual partner during the last sexual intercourse	106	35.9	101	49.3	1.7 (1.2-2.4)	0.003	18	10.6	0.2 (0.1-0.3)	<0.0001
Never used condom with regular sexual partner during the last 12 months	116	39.3	61	29.8	0.6 (0.4-0.9)	0.03	74	43.5	1.2 (0.8-1.7)	0.3
Regular sexual partner injects drugs	7	2.4	5	2.4	1.0 (0.3-3.2)	0.9	5	2.9	1.2 (0.3-4.0)	0.7
Casual sexual partner(s) during the last 12 months										
Had casual sexual partner during the last 12 months	110	29.9	69	25.3	0.8 (0.5-1.1)	0.2	86	32.0	1.1 (0.8-1.5)	0.5
Used condom during the last casual sexual intercourse	90	81.8	54	78.3	0.8 (0.3-1.8)	0.6	48	55.8	0.3 (0.1-0.5)	<0.0001
Never used condom with casual sexual partner during the last 12 months	12	10.9	5	7.2	0.6 (0.2-1.9)	0.4	1	1.2	0.1 (0.01-0.7)	0.02
Casual sexual partner injects drugs	7	6.4	2	2.9	0.4 (0.08-2.17)	0.3	9	10.5	1.7 (0.6-4.8)	0.3
Paid sexual partner(s) during the last 12 months										
Had paid sexual partner during the last 12 months	32	8.5	20	7.3	0.8 (0.4-1.5)	0.6	94	34.9	5.8 (3.7-9.0)	<0.0001

Used condom during the last paid sexual intercourse	28	87.5	17	85.0	0.8 (0.1-4.0)	0.8	87	92.6	1.7 (0.5-6.5)	0.4
Never used condom with paid sexual partner during the last 12 months	3	9.4	0	0	-	-	0	0	-	-
Paid sexual partner injects drugs	5	15.6	3	15.0	0.9 (0.2-4.5)	0.9	13	13.8	0.8 (0.2-2.6)	0.8
Homosexual contact										
Ever had sexual partner of the same sex	2	0.5	1	0.4	0.6 (0.06-7.5)	0.7	0	0	-	-
Used condom during the last homosexual contact	1	50.0	0	0	-	-	0	0	-	-
Anal sex practice during the last 12 months										
Had anal sex with any sexual partner during the last 12 months	10	2.6	0	0	-	-	9	3.3	1.2 (0.5-3.1)	0.6
Used condom during the last anal sex	5	50.0	0	0	-	-	6	66.7	2.0 (0.3-12.8)	0.4
Access to condoms										
Had any problem with obtaining condoms	4	1.1	4	1.5	1.3 (0.3-5.6)	0.6	3	1.1	1.0 (0.2-4.7)	0.9

Table E3. Sexual behaviour by age groups

Characteristics	≤35 years old		>35 years old		OR; 95% CI	*p*
	N	%	N	%		
History of sexual life						
Had sexual intercourse with opposite-sex partner during the last 12 months	415	97.6	1235	81.0	0.1(0.5-0.2)	<0.0001
Condom use during the last sexual intercourse						
Used condom during the last sexual intercourse	194	47.3	435	35.3	0.6(0.5-0.7)	<0.0001
Regular sexual partner during the last 12 months						
Had sex with regular sexual partner during the last 12 months	328	77.4	1111	73.1	0.7(0.6-1.0)	0.08
Used condom with regular sexual partner during the last sexual intercourse	105	32.0	317	28.5	0.8(0.6-1.1)	0.2
Never used condom with regular sexual partner during the last 12 months	100	30.5	455	41.0	1.5(1.2-2.0)	0.001
Regular sexual partner injects drugs	13	4.0	38	3.4	0.8(0.4-1.6)	0.6
Casual sexual partner(s) during the last 12 months						
Had casual sexual partner during the last 12 months	190	45.0	308	20.4	0.3(0.2-0.3)	<0.0001
Used condom during the last casual sexual intercourse	139	74.7	219	75.3	1.0(0.6-1.5)	0.8
Never used condom with casual sexual partner during the last 12 months	8	4.2	36	11.7	3.0(1.3-6.6)	0.004
Casual sexual partner injects drugs	11	5.8	20	6.5	1.1(0.5-2.4)	0.7
Paid-for sexual partner(s) during the last 12 months						
Had paid sexual partner during the last 12 months	107	25.2	131	8.7	0.3(0.2-0.3)	<0.0001
Used condom during the last paid sexual intercourse	101	94.4	110	84.0	0.3(0.1-0.8)	0.01
Never used condom with paid sexual partner during the last 12 months	2	1.9	8	6.1	3(0.7-16.4)	0.1

Paid sexual partner injects drugs	13	12.1	16	12.2	1.0(0.4-2.1)	0.9
Homosexual contact						
Ever had sexual partner of the same sex	7	1.7	18	1.2	0.7(0.2-1.7)	0.4
Used condom during the last homosexual contact	4	57.1	5	27.8	0.2(0.04-1.7)	0.1
Anal sex practice during the last 12 months						
Had anal sex with any sexual partner during the last 12 months	56	12.9	75	4.8	0.3(0.2-0.4)	<0.0001
Used condom during the last anal sex	30	53.6	31	41.3	0.6(0.3-1.2)	0.1
Access to condoms						
Had any problem with obtaining condoms	13	3.0	25	1.6	0.5(0.2-1.0)	0.05

Table E4. Sexual behaviour by level of education

Characteristics	High school or Vocational college		University		OR; 95% CI	*p*
	N	%	N	%		
Used condom during the last sexual intercourse	367	37.6	257	39.4	1.0(0.8-1.3)	0.4
Had casual sexual partner during the last 12 months	292	25	203	27.1	1.1(0.9-1.3)	0.2
Used condom during the last casual sexual intercourse	212	76.5	144	73.1	0.8(0.5-1.2)	0.4
Never used condom with casual sexual partner during the last 12 months	26	8.9	17	8.4	0.9(0.4-1.7)	0.8
Had paid sexual partner during the last 12 months	133	11.3	104	13.8	1.2(0.9-1.6)	0.1
Used condom during the last paid sexual intercourse	116	87.2	94	90.4	1.3(0.6-3.1)	0.4
Never used condom with paid sexual partner during the last 12 months	6	4.5	4	3.8	0.8(0.2-3.0)	0.8
Had anal sex with any sexual partner during the last 12 months	76	6.2	54	7.0	1.1(0.8-1.6)	0.4
Used condom during the last anal sex	34	44.7	27	50.0	1.2(0.6-2.4)	0.5

Table E5. Sexual behaviour by use of preventive programs

Characteristics	Used		Didn't Use		OR; 95% CI	*p*
	N	%	N	%		
Used condom during the last sexual intercourse	353	43.4	190	31.6	1.6(1.3-2.0)	<0.0001
Used condom during the last casual sexual intercourse	184	81.8	104	72.7	1.6(1.1-2.7)	0.04
Never used condom with casual sexual partner during the last 12 months	17	7.4	17	11.3	0.6(0.3-1.2)	0.1
Used condom during the last paid sexual intercourse	56	87.5	102	88.7	1.1(0.4-2.8)	0.8
Never used condom with a paid sexual partner during the last 12 months	4	3.5	4	6.3	0.5(0.1-2.2)	0.3
Used condom during the last anal sex	43	64.2	12	31.6	3.8(1.6-9.0)	0.001

Table E6. Sexual behaviour by drug use frequency

Characteristics	Once/several times a month		Once a week or more		OR; 95% CI	*p*
	N	%	N	%		
Used condom during the last sexual intercourse	241	39.8	377	37.5	0.9(0.7-1.1)	0.3
Had casual sexual partner during the last 12 months	179	24.5	309	26.6	1.1(0.9-1.3)	0.3
Used condom during the last casual sexual intercourse	129	74.6	225	76.0	1.0(0.7-1.6)	0.7
Never used condom with casual sexual partner during the last 12 months	17	9.5	27	8.7	0.9(0.4-1.7)	0.7
Had paid sexual partner during the last 12 months	65	8.9	155	13.9	1.5(1.1-2.1)	0.004
Used condom during the last paid sexual intercourse	57	87.7	137	88.4	1.0(0.4-2.5)	0.8
Never used condom with paid sexual partner during the last 12 months	5	7.7	5	3.2	0.4(0.1-1.4)	0.1
Had anal sex with any sexual partner during the last 12 months	39	5.2	90	7.4	1.4(0.9-2.1)	0.05
Used condom during the last anal sex	12	30.8	49	54.4	2.6(1.2-5.9)	0.01

Table E7. Sexual behaviour over by alcohol consumption frequency

Characteristics	Never/Rarely		Once a week or more		OR; 95% CI	*p*
	N	%	N	%		
Used condom during the last sexual intercourse	412	39.1	217	37.0	0.9(0.7-1.1)	0.3
Had casual sexual partner during the last 12 months	323	26.0	175	25.4	0.9(0.7-1.2)	0.7
Used condom during the last casual sexual intercourse	249	79.8	109	66.1	0.5(0.3-0.7)	0.001
Never used condom with casual sexual partner during the last 12 months	25	7.7	19	10.9	1.4(0.7-2.7)	0.2
Had paid sexual partner during the last 12 months	120	9.6	118	17.1	1.9(1.4-2.5)	<0.0001
Used condom during the last paid sexual intercourse	107	89.2	104	88.1	0.9(0.4-2.0)	0.8
Never used condom with paid sexual partner during the last 12 months	5	4.2	5	4.2	1.0(0.2-3.6)	0.9
Had anal sex with any sexual partner during the last 12 months	90	7.0	41	5.7	0.8(0.5-1.1)	0.2
Used condom during the last anal sex	45	50.0	16	39.0	0.6(0.3-1.3)	0.2

Table 1.1.1. Comparison of biomarker test results

Characteristics	2017		2022	
	N	%	N	%
HCV screening results				
Positive	1295	63.2	1164	58.1
Negative	754	36.8	841	41.9
Anti-HCV prevalence by cities				
Tbilisi	282	76.2	211	55.5
Gori	188	67.3	180	66.7
Rustavi	150	53.5	139	51.5
Telavi	139	49.6	141	52.2
Batumi	207	73.9	157	58.1
Zugdidi	139	49.6	211	76.7
Kutaisi	190	67.8	125	46.3
HIV screening results				
Positive	47	2.3	19	0.9
Negative	2003	97.7	1986	99.1
HIV prevalence by cities				
Tbilisi	5	1.3	2	0.5
Gori	8	2.8	4	1.5
Rustavi	2	0.7	1	0.4
Telavi	6	2.1	2	0.7
Batumi	13	4.6	3	1.1
Zugdidi	4	1.4	7	2.5
Kutaisi	9	3.2	0	0.0
Prevalence of coinfection				
HCV/HBV coinfection			38	1.9
HCV/HIV coinfection	43	2.0	16	0.8
HBV/HIV coinfection			2	0.09

Table 1.1.1-A. PWID who are living with HIV

Characteristics	N	%
PWID who are living with HIV		
All	19	0.9
Disaggregated by gender		
Female	0	0
Male	19	100
Disaggregated by age		
<25 years	0	0
≥25 years	19	100

Table 1.1.2. HBV and HCV test results

Characteristics	N	%
HBV screening results		
Positive	51	2.5
Negative	1954	97.5
HBsAg prevalence by cities		
Tbilisi	8	2.1
Gori	9	3.3
Rustavi	9	3.3
Telavi	6	2.2
Batumi	4	1.5
Zugdidi	13	4.8
Kutaisi	2	0.7
HCV RNA study result		
Positive	280	32.1
Negative	593	67.9
HCV RNA prevalence by cities		
Tbilisi	56	28.6
Gori	33	30.0
Rustavi	42	33.3
Telavi	27	20.9
Batumi	37	38.1
Zugdidi	74	43.5
Kutaisi	11	24.4
HCV treatment		
Has received treatment	680	33.9
Has not received treatment	1325	66.1
HCV reinfection prevalence		
Case of reinfection detected	60	13.0
HCV reinfection prevalence by cities		
Tbilisi	15	12.2
Gori	3	5.3
Rustavi	7	10.9
Telavi	7	9.5
Batumi	8	22.9
Zugdidi	15	20.5
Kutaisi	5	13.9
Are you vaccinated against HBV?		
Yes	151	7.5
No	1409	70.3
Don't know	429	21.4
No response	16	0.8
Where did you get your HBV vaccine?		
In hospital	96	4.8
In prison	31	1.5
Abroad	15	0.7
Don't know	2	0.1
No response	7	0.3

Missing	1854	92.5
Are you willing to get vaccinated against HBV?		
Yes	392	27.8
No	684	48.5
Don't know	312	22.1
No response	22	1.6

Table 1.1.3. Knowledge and Attitude towards HCV

Characteristics	2017		2022	
How can the risk of HCV infection be reduced?	N	%	N	%
By vaccination	1027	50.1	189	9.4
By using condoms	711	34.7	976	48.7
By not sharing used needle and syringe	953	46.5	1725	86.0
By not sharing injection device	223	10.9	1562	77.9
By not using non-sterile or used medical equipment	766	37.4	1268	63.2
Other	678	33.1	27	1.3
Don't know/Don't remember	112	5.5	69	3.4
No response	4	0.2	5	0.2
Do you know/have you heard about hepatitis C elimination program?				
Yes	1985	98.4	1780	88.8
No	33	1.6	225	11.2
Where did you get information/hear about hepatitis C elimination program?				
At medical facility	-	-	447	25.1
At methadone substitution therapy center/department			136	7.6
At harm reduction service center	248	12.3	884	49.7
From TV	1132	56.1	318	17.9
From internet	1487	73.7	335	18.8
From friends/relatives	-	-	770	43.3
Other	-	-	39	2.1
Don't know/ No response	-	-	17	1.0
Do you know where you can take hepatitis C test?				
Yes	1615	78.8	1777	88.6
No	422	20.6	120	6.0
Don't know/Don't remember	12	0.6	108	5.4
Have you ever taken hepatitis C test?				
Yes, during the last 2 years	1180	57.6	1135	56.6
Yes, between the last 2-5 years period	198	9.7	471	23.5
Yes, 5 years ago	116	5.7	191	9.5
No	544	26.5	167	8.3
Don't know	10	0.5	22	1.1
No response	-	-	19	0.9
Why did you not take hepatitis C test?				
I am afraid of the positive result	66	12.1	12	7.2
I don't think it's necessary	183	33.6	52	31.1
I don't know where to test	-	-	13	7.8
I don't want to treat and that's why I don't want to know the result	-	-	9	5.4
They will find out that I am a drug user	-	-	2	1.2
I did not have money	-	-	2	1.2
I have not thought about it	181	33.3	61	36.5
Other	-	-	11	6.5
Don't know/Don't remember	-	-	7	4.3
Have you ever taken medications to treat hepatitis C?				
Yes, during the last 2 years	257	17.1	226	12.3
Yes, between the last 2-5 years period	9	0.6	324	17.6
Yes, 5 years ago	27	1.8	217	11.8
No	1213	80.5	1045	56.9
Don't know	-	-	3	0.2
No response	-	-	23	1.3
Why did you not get treatment for hepatitis C?				

I am not infected and don't need to treat	449	37.0	737	70.5
The treatment was not available	-	-	5	0.5
My doctor told me that the treatment was not necessary	71	5.9	90	8.6
It was very expensive	127	10.5	2	0.2
I heard that the treatment had many side effects	67	5.6	45	4.3
I had to go very far away to take the medicine and meet the doctor	-	-	3	0.3
I am in the waiting list	145	12.0	30	2.9
Other	-	-	86	8.2
Don't know	-	-	28	2.7
No response	-	-	3	0.3
Did you finish the treatment for hepatitis C or did you cease it before ending?				
I finished the treatment	227	77.5	677	85.4
I ceased it before ending	20	6.8	33	4.2
I am currently undergoing treatment	45	15.4	15	1.9
Don't know	1	0.3	1	0.1
No response	-	-	67	8.4
What was the reason for ceasing the treatment before ending?				
The side effects of the treatment	6	30.0	14	42.4
The treatment provider was far from me geographically	-	-	4	12.1
Stigma/Discrimination/Negative attitude of the medical facility/the doctor	-	-	1	3.0
Other	14	70.0	10	30.3
No response	-	-	4	12.1
Did you have a follow-up examination 12-24 weeks after the end of the treatment to find out if you have recovered or not?				
Yes	-	-	568	80.1
No	-	-	81	11.4
Don't know	-	-	41	5.8
No response	-	-	19	2.7
Did you recover as a result of the treatment for hepatitis C? (The analysis confirmed that the hepatitis C virus is no longer in the blood)				
Yes	188	82.8	588	82.8
No	14	6.2	22	3.1
Don't know	25	11.0	85	12.0
No response	-	-	15	2.1
Where do you prefer to receive services (testing, confirmation, treatment)?				
At the hepatitis C treatment medical facility in my city	1788	87.2	1004	50.1
At the methadone substitution therapy center/department in my city	20	1.0	70	3.5
At the harm reduction service center (syringe and needle program) in my city	65	3.2	1031	51.4
At another service provider in my city	4	0.2	53	2.6
Other	172	8.4	54	2.6

Table 1.1.4. Knowledge and Attitude towards HCV

Is it possible to get treatment for HCV in Georgia?	N	%
Yes, for free	1744	98.0
Yes, it requires payment	16	0.9
No	4	0.2
No response	16	0.9
Why did you not have a final examination after the end of the treatment to find out the result of the treatment?		
The examinations were expensive	4	4.0
I didn't know/The doctor has not told me that I had to have an examination	6	6.0
I did not consider it necessary	11	11.0
Other	33	33.0
Don't know	22	22.0
No response	24	24.0
Did you get the repeated treatment?		
Yes	7	9.2
No	58	76.3
No response	11	14.5
Have you injected the drugs during the treatment period?		
Yes	340	42.9
No	368	46.4
No response	85	10.7
Did you resume/continue to inject the drugs after ending/ceasing the treatment?		
Yes	688	86.8
No	10	1.3
No response	95	12.0

- *The stated data is not available in the 2017 study.*

Table 1.2.1. HCV seroprevalence

Characteristics	Anti-HCV test result				*P*	OR; 95% CI
	Positive		Negative			
Sex						
Female	10	35.7	18	64.3	<0.05	0.96 (0.18-0.86)
Male	1154	58.4	823	41.6		
Age						
≤35	90	20.7	345	79.3	<0.001	8.3 (6.43-10.71)
>35	1074	68.4	496	31.6		
City						
Tbilisi	211	55.5	169	44.5		1
Gori	180	66.7	90	33.3	<0.01	1.60 (1.15-2.21)
Rustavi	139	51.5	131	48.5	0.30	0.85 (0.62-1.16)
Telavi	141	52.2	129	47.8	0.40	0.87 (0.64-1.19)
Batumi	157	58.1	113	41.9	0.50	1.11 (0.81-1.52)
Zugdidi	211	76.7	64	23.3	<0.001	2.64 (1.87-3.72)
Kutaisi	125	46.3	145	53.7	<0.05	0.69 (0.50-0.94)
Nationality						
Georgian	1070	58.6	756	41.4	0.23	1.35 (0.83-2.20)
Other	50	65.8	26	34.2		
Have you received free condoms in Georgia during the last 5 years?						
Yes	175	46.2	204	53.8	0.25	1.19 (0.88-1.60)
No	140	41.8	195	58.2		
Have you received free syringes/needles/butterfly needles/spoons/alcohol pads in Georgia during the last 5 years?						
Yes	201	45.8	238	54.2	0.28	1.19 (0.88-1.60)
No	115	41.5	162	58.5		
Who do you usually inject the drugs with?						
With the same drug users	565	57.8	412	42.2	<0.01	0.72 (0.58-0.90)
I inject the drugs alone	339	65.4	179	34.6		1
With the different drug users	244	50.7	237	49.3	<0.001	0.54 (0.42-0.70)
Have you been injecting opiates continuously every day during the last 12 months?						
Yes	563	65.5	296	34.5	<0.001	1.72 (1.43-2.07)
No/Don't remember/No response	601	52.4	545	47.6		

Have you ever used a needle/syringe/butterfly needle already used by someone else?						
Yes	372	75.9	118	24.1	<0.001	2.87 (2.28-3.61)
No	792	52.3	722	47.7		
Have you ever used a needle/syringe/butterfly needle already used by yourself?						
Yes	506	62.2	302	37.4	<0.01	1.36 (1.13-1.64)
No	657	55.1	536	44.9		
Have you ever been treated or received specific help because you use drugs?						
Yes	527	70.4	222	29.6	<0.001	2.30 (1.90-2.79)
No	637	50.7	619	49.3		
With the different drug users	244	50.7	237	49.3	<0.001	0.54 (0.42-0.70)
Have you had sex with a partner of the opposite sex during the last 12 months?						
Yes	914	55.4	736	44.6	<0.001	0.46 (0.35-0.61)
No	217	72.6	82	27.4		
Have you had a paid sexual partner during the last 12 months?						
Yes	102	42.7	137	57.3	<0.001	0.56 (0.42-0.74)
No	679	56.9	515	43.1		
Have you had a partner of the same sex during the last 12 months?						
Yes	16	64.0	9	36.0	0.68	1.29 (0.56-2.94)
No	1111	57.9	809	42.1		
The last time you had sex with your regular sexual partner did you use a condom?						
Yes	242	57.3	180	42.7	0.63	1.06 (0.84-1.33)
No	546	55.9	431	44.1		
How often did you use condoms with your partner during the last year?						
Always	111	60.3	73	39.7		1
Almost always/Sometimes	315	51.6	296	48.4	<0.05	0.70 (0.50-0.97)
Never	337	60.7	218	39.3	0.92	1.01 (0.72-1.43)
How often did you use condoms with your casual sexual partner during the last year?						
Always	112	45.5	119	51.5		1
Almost always/Sometimes	96	46.2	112	53.8	0.62	0.91 (0.62-1.32)
Never	28	63.6	16	36.4	0.06	1.85 (0.95-3.62)

Have you ever been sentenced to prison?						
Yes	701	68.1	328	31.9	<0.001	2.42 (2.02-2.91)
No	441	46.8	501	53.2		
How many times have you been sentenced to prison?						
Once	250	64.6	137	35.4	0.06	0.77 (0.59-1.01)
More than once	451	70.2	191	29.8		
How old were you when you were imprisoned for the first time?						
<18	53	80.3	13	19.7		1
18-30	378	70.1	161	29.9	0.08	0.57 (0.30-1.08)
>30	164	82.0	36	18.0	0.75	1.11 (0.55-2.26)
How long were you imprisoned the last time?						
≤1 year	214	71.6	85	28.4	0.32	0.84 (0.61-1.16)
>1 year	372	74.8	125	25.2		
Have you ever used drugs while being imprisoned?						
Yes	198	85.3	34	14.7	<0.001	2.97 (1.94-4.55)
No	229	66.2	117	33.8		
Have you received methadone/suboxone substitution therapy services during the last 12 months?						
Yes	330	75.7	106	24.3	0.15	1.45 (0.89-2.37)
No	64	68.1	30	31.9		
Have you received a clean syringe from the syringe and needle program during the last 30 days?						
Yes	609	57.3	454	42.7	0.46	0.93 (0.73-1.11)
No	555	58.9	387	41.1		

Table 1.2.2. HCV reinfection

Characteristics	HCV reinfection				*P*	OR; 95% CI
	Positive		Negative			
Age						
≤35	8	10.8	66	89.2	0.15	0.57 (0.26-1.26)
>35	52	6.5	747	93.5		
Have you received free condoms in Georgia during the last 5 years?	N	%	N	%		
Yes	10	7.5	124	92.5	0.64	0.75 (0.30-1.84)
No	11	9.6	103	90.4		
Have you received free syringes/needles/butterfly needles/spoons/alcohol pads in Georgia during the last 5 years?						
Yes	13	8.6	139	91.4	1.00	1.04 (0.41-2.61)
No	8	8.2	89	91.8		
Who do you usually inject the drugs with? B4						
With the same drug users	31	7.3	396	92.7	0.63	0.86 (0.48-1.54)
I inject the drugs alone	21	8.3	233	91.7		1
With the different drug users	8	4.4	173	95.6	0.11	0.51 (0.22-1.18)
Have you been injecting opiates continuously every day during the last 12 months?						
Yes	35	8.5	378	91.5	0.08	0.62 (0.36-1.05)
No/Don't remember/No response	25	5.4	435	94.6		
How often did you inject the drugs during the last month?						
Everyday	19	8.3	211	91.7	0.36	0.76 (0.43-1.34)
Less often	41	6.4	596	93.6		
Have you ever used a needle/syringe/butterfly needle already used by someone else?						
Yes	20	8.5	216	91.5	0.29	1.38 (0.79-2.41)

No	40	6.3	597	93.7		
Have you ever used a needle/syringe/butterfly needle already used by yourself?						
Yes	30	8.2	338	91.8	0.22	1.4 (0.83-2.37)
No	30	6.0	474	94.0		
The last time you used the drugs, did you inject them with the needle/syringe/butterfly needle already used by yourself?						
Yes	10	14.1	61	85.9	0.5	2.23 (1.03-4.84)
No	27	6.8	368	93.2		
How often did you use a new, sterile needle/syringe/butterfly needle during the last month?						
Always	46	6.6	653	93.4		1
Almost always/Sometimes	10	6.6	141	93.4	0.98	1.0 (0.49-2.04)
Never	2	20.0	8	80.0	0.11	3.5 (0.73-17.1)
How often did you use the pre-filled syringe during the last month?						
Always/Almost always	2	10.0	18	90.0		1
Sometimes/Once	12	5.8	196	94.2	0.45	0.55 (0.11-2.65)
Never	44	7.0	584	93.0	0.61	0.67 (0.15-3.01)
Have you ever been sentenced to prison?						
Yes	37	7.5	458	92.5	0.49	1.23 (0.71-2.13)
No	22	6.1	337	93.9		
How many times have you been sentenced to prison?						
Once	12	6.0	188	94.0	0.38	0.68 (0.33-1.40)
More than once	25	8.5	270	91.5		
How long were you imprisoned the last time?						
≤1 year	9	6.1	139	93.9	0.20	1.68 (0.77-3.69)
>1 year	27	9.9	247	90.1		

Table 1.2.3. HCV treatment

Characteristics	HCV Treatment				*P*	OR; 95% CI
	Treated		Not treated			
Age						
≤35	41	9.4	394	90.6	<0.001	6.59 (4.70-9.23)
>35	639	40.7	931	59.3		
City						
Tbilisi	130	34.2	250	65.8		1
Gori	127	47.0	143	53.0	<0.01	1.7 (1.24-2.35)
Rustavi	65	24.1	205	75.9	<0.01	0.61 (0.43-0.86)
Telavi	77	28.5	193	71.5	0.12	0.7 (0.54-1.07)
Batumi	72	26.7	198	73.3	<0.05	0.69 (0.49-0.98)
Zugdidi	101	36.7	174	63.3	0.50	1.11 (0.80-1.54)
Kutaisi	108	40.0	162	60.0	0.13	1.28 (0.92-1.77)
Have you ever taken HCV medications?						
Yes	618	80.6	149	19.4	<0.001	0.01 (0.00-0.01)
No	54	5.2	991	94.8		
Have you ever been sentenced to prison?	N	%	N	%		
Yes	437	42.5	592	57.5	<0.001	0.44 (0.36-0.53)
No	232	24.6	710	75.4		
How many times have you been sentenced to prison?						
Once	143	37.0	244	63.0	<0.01	1.44 (1.11-1.86)
More than once	394	45.8	348	54.2		
How long were you imprisoned the last time?						
≤1 year	116	38.8	183	61.2	<0.01	1.48 (1.10-1.98)
>1 year	241	48.5	256	51.5		
Are you vaccinated against HBV?						
Yes	72	10.6	79	6.0	<0.001	0.5 (0.38-0.74)
No/Don't know	608	89.4	1246	94.0		
Have you received methadone/suboxone substitution therapy services during the last 12 months?						

Yes	201	46.1	235	53.9	0.73	0.90 (0.57-1.41)
No	41	43.6	53	56.4		
Have you received a clean syringe from the syringe and needle program during the last 30 days?						
Yes	398	37.4	665	62.6	<0.001	0.71 (0.52-0.86)
No	282	29.9	660	70.1		

Table 1.2.4. HCV RNA testing

Characteristics	HCV confirmation				*P*	OR; 95% CI
	Positive		Negative			
Have you received methadone/suboxone substitution therapy services during the last 12 months?						
Yes	75	33.0	152	67.0	0.71	0.88 (0.43-1.79)
No	14	35.9	25	64.1		
Have you received a clean syringe from the syringe and needle program during the last 30 days?						
Yes	115	27.8	299	72.2	<0.05	0.68 (0.51-0.91)
No	165	35.9	294	64.1		

Table 5. HCV seroprevalence. Multivariate analysis

Characteristics	Anti-HCV test result				*P*	aOR; 95% CI
	Positive		Negative			
Age						
≤35	90	20.7	345	79.3	<0.001	0.12 (0.08-018)
>35	1074	68.4	496	31.6		
City						
Tbilisi	211	55.5	169	44.5		1
Gori	180	66.7	90	33.3	0.48	1.11 (0.73-1.89)
Rustavi	139	51.5	131	48.5	<0.05	2.02 (1.11-3.69)
Telavi	141	52.2	129	47.8	0.86	1.0 (0.57-1.94)
Batumi	157	58.1	113	41.9	<0.05	1.93 (1.05-3.54)
Zugdidi	211	76.7	64	23.3	<0.001	4.64 (2.27-9.49)
Kutaisi	125	46.3	145	53.7	<0.01	0.41 (0.24-0.68)
Have you been injecting opiates continuously every day during the last 12 months?						
Yes	563	65.5	296	34.5	<0.05	1.42 (1.01-1.98)
No/Don't remember/No response	601	52.4	545	47.6		
Have you ever used a needle/syringe/butterfly needle already used by someone else?						
Yes	372	75.9	118	24.1	<0.001	2.75 (1.86-4.06)
No	792	52.3	722	47.7		
Have you ever been treated or received specific help because you use drugs?						
Yes	527	70.4	222	29.6	<0.001	1.97 (1.41-2.78)
No	637	50.7	619	49.3		
Have you ever used drugs while being imprisoned?						
Yes	198	85.3	34	14.7	<0.01	2.12 (1.38-3.24)
No	229	66.2	117	33.8		

Table 6. HCV treatment. Multivariate analysis

Characteristics	HCV treatment				*P*	aOR; 95% CI
	Treated		Not treated			
Age						
≤35	41	9.4	394	90.6	<0.001	0.22 (0.13-0.37)
>35	639	40.7	931	59.3		
How many times have you been sentenced to prison?						
Once	143	37.0	244	63.0	<0.01	0.64 (0.47-0.88)
More than once	394	45.8	348	54.2		

Table H1. Knowledge and Attitude towards HIV/AIDS and Self-evaluation of Risks

Characteristics	N	%
Have you heard about HIV infection?		
Yes	1738	86.7
No	210	10.5
Don't know	53	2.6
No response	4	0.2
Have you heard about AIDS disease?		
Yes	1941	96.8
No	49	2.4
Don't know	10	0.5
No response	5	0.2
Do you know anyone around you who is infected with HIV, has AIDS or died of AIDS?		
Yes	862	43.8
No	1066	54.2
Don't know	38	1.9
No response	1	0.1
Do you have a close relative or a close friend who is infected with HIV, has AIDS or died of AIDS?		
Yes, close relative	74	8.6
Yes, close friend	303	35.2
No	291	33.8
Other	136	15.8
Don't know	10	1.2
No response	48	5.6
What do you think how high is your risk of infecting with HIV?		
High risk	110	5.6
Medium risk	507	25.8
Low risk	763	38.8
There is no risk	342	17.4
Don't know	185	9.4
No response	60	3.1
The risk of transmitting HIV infection (that causes AIDS) can be reduced by having one uninfected and devoted sexual partner	1733	88.1
The risk of transmitting HIV infection can be reduced by using condoms during each sexual contact	1810	92.0
A healthy-looking person can be infected with HIV that causes AIDS	1502	76.4
HIV infection can be transmitted as a result of a mosquito's bite	325	16.5
One can get infected by sharing food with a person infected with HIV	137	7.0
One can get infected with HIV by using a needle/syringe used by someone else	1826	92.8
One can get infected with HIV by using shared injection device (utensil, spoon, cotton/filter), or water previously touched by a needle/syringe used by someone else	1670	84.9
One can get infected with HIV by using the drug solution prepared without his/her presence from the container	1572	79.9
A drug user can protect oneself from getting infected by switching to noninjection drugs	1443	73.4

HIV infection can be transferred from HIV-infected mother to her fetus or child	1126	57.2
What do you think, is it possible to take a free and confidential test in your district (city) to reveal HIV-infection?		
Yes	1591	80.9
No	67	3.4
Don't know	274	13.9
No response	35	1.8
If you wish to take an HIV test, do you know where to apply?		
Yes	1757	89.3
No	150	7.6
Don't know	2	0.1
No response	58	2.9
Do you know where to apply to take a free HIV test?		
Yes	1651	94.0
No	53	3.0
Don't know	23	1.3
No response	30	1.7
I don't want to know the results, but have you ever taken an HIV test?		
Yes	1687	85.8
No	250	12.7
No response	30	1.5
When did you take the very last HIV test?		
Within the last year	752	44.6
Between the past 1-2 years period	469	27.8
2 years ago	389	23.1
Don't know	27	1.6
No response	49	2.9
Please name the reason why didn't you take an HIV test during last 12 months?		
I am afraid of the positive result	45	4.0
I don't think it's necessary	362	31.9
I don't know where to test	51	4.5
I am afraid that the test results will be made public	3	0.3
They will find out that I am a drug user	9	0.8
I am afraid that the police will find out	4	0.4
I did not have money	5	0.4
I have not thought about it	338	29.8
Other	38	3.3
Please tell me, was it your initiative to take the test or it was needed for the document/certificate?		
My initiative	1492	91.1
Certificate	57	3.5
I took the test in prison	23	1.4
Other	55	3.4
Don't tell me the test result, but did you find it out?		
Yes	1588	96.9
No	15	0.9
No response	35	2.1
If by chance you were infected with HIV would you inform your spouse/regular sexual partner?		

Yes	1804	89.9
No	11	0.5
Don't know	95	4.7
No response	95	4.7
If by chance you were infected with HIV would you inform your IDU partners?		
Yes	1757	87.6
No	24	1.2
Don't know	111	5.5
No response	113	5.6
Will you take an HIV test if it is free and is held in a state/government facility?		
Yes	1470	73.3
No	213	10.6
Don't know	224	11.2
No response	98	4.9
If "No", why?		
I am afraid of the positive test result	1	0.5
I don't think it's necessary	75	35.2
I am afraid that the test results will be made public	54	25.4
They will find out that I am a drug user	43	20.2
I am afraid that the police will find out	7	3.3
Other	3	1.4
No response	30	14.1
From which of the below listed sources did you get information about HIV/AIDS?		
Radio	84	4.3
TV	851	43.3
Magazines/Journals	120	6.1
Booklets/Other printed information materials	278	14.1
Healthcare workers	321	16.3
School/Teachers	35	1.8
Friends/Acquaintance/Relatives/Colleagues	1029	52.3
Non-governmental organizations (NGO) representatives/Social Workers	917	46.6
Billboards/Street Advertising	34	1.7
Internet	548	27.9
Other	34	1.7

Table H2.1. Knowledge and Attitude towards HIV/AIDS and Self-evaluation of Risks by cities

Characteristics	Tbilisi[1]		Gori		OR; 95% CI	*p*	Rustavi		OR; 95% CI	*p*
	N	%	N	%			N	%		
Has heard about HIV infection	309	81.3	259	95.9	5.41 (2.80-10.42)	<0.001	269	99.6	61.80 (8.53-447.87)	<0.001
Has heard about AIDS disease	353	92.9	266	98.5	5.09 (1.76-14.71)	<0.01	269	99.6	20.57 (2.78-152.37)	<0.01
Has heard of someone who is infected with HIV, has AIDS or died of AIDS	144	38.5	133	50.0	1.60 (1.16-2.20)	<0.01	48	17.8	0.35 (0.24-0.50)	<0.001
Has a close relative or a close friend who is infected with HIV, has AIDS or died of AIDS	98	68.1	95	71.4	1.17 (0.70-1.96)	0.54	34	70.8	1.14 (0.56-2.33)	0.72
Thinks that has risk of infecting with HIV	238	63.6	208	78.2	2.05 (1.43-2.94)	<0.001	232	86.2	3.58 (2.39-5.38)	<0.001
The risk of transmitting HIV infection (that causes AIDS) can be reduced by having one uninfected and devoted sexual partner	265	70.9	246	92.5	5.06 (3.05-8.40)	<0.001	265	98.5	27.25 (9.90-74.98)	<0.001
The risk of transmitting HIV infection can be reduced by using condoms during each sexual contact	318	85.0	243	91.4	1.86 (1.11-3.11)	0.02	265	98.5	11.67 (4.18-32.60)	<0.001
A healthy-looking person can be infected with HIV that causes AIDS	281	75.1	184	69.2	0.74 (0.52-1.05)	0.10	257	95.5	7.09 (3.80-13.24)	<0.001
HIV infection can be transmitted as a result of a mosquito's bite	96	25.7	38	14.3	0.48 (0.32-0.73)	0.001	10	3.7	0.11 (0.06-0.22)	<0.001
One can get infected by sharing food with a person infected with HIV	30	8.0	18	6.8	0.83 (0.45-1.53)	0.55	7	2.6	0.31 (0.13-0.71)	0.006

One can get infected with HIV by using a needle/syringe used by someone else	357	95.5	257	96.6	1.36 (0.60-3.10)	0.46	265	98.5	3.15 (1.05-9.48)	0.04
One can get infected with HIV by using shared injection device (utensil, spoon, cotton/filter), or water previously touched by a needle/syringe used by someone else	327	87.4	235	88.3	1.09 (0.67-1.77)	0.73	266	98.9	12.74 (3.92-41.40)	<0.001
One can get infected with HIV by using the drug solution prepared without his/her presence from the container	311	83.2	224	84.2	1.08 (0.71-1.66)	0.72	260	96.7	5.85 (2.86-11.99)	<0.001
A drug user can protect oneself from getting infected by switching to noninjection drugs	269	71.9	196	73.7	1.09 (0.77-1.56)	0.62	259	96.3	10.11 (5.17-19.78)	<0.001
HIV infection can be transferred from HIV-infected mother to her fetus or child	198	52.9	153	57.5	1.20 (0.88-1.65)	0.25	246	91.4	9.51 (5.92-15.26)	<0.001
It is possible to take a free and confidential test in your district (city) to reveal HIV-infection	202	54.0	232	87.2	5.81 (3.84-8.78)	<0.001	267	99.3	113.67 (27.87-463.68)	<0.001
Knows where to apply in case he/she wishes to take an HIV test	311	83.2	261	98.1	10.57 (4.19-26.68)	<0.001	268	99.6	54.29 (7.48-394.07)	<0.001
Knows where to apply to take a free HIV test	258	83.0	252	96.6	5.75 (2.78-11.91)	<0.001	265	98.9	18.15 (5.60-58.80)	<0.001
Has ever taken an HIV test	286	76.5	246	92.5	3.78 (2.26-6.33)	<0.001	258	95.9	7.22 (3.77-13.81)	<0.001
The very last HIV test he/she took was within the last 1 year	70	19.5	76	29.0	1.69 (1.17-2.45)	<0.01	99	37.2	2.45 (1.71-3.51)	<0.001
Took the test on his/her own initiative	230	84.2	223	94.5	3.21 (1.68-6.13)	<0.001	244	97.6	7.60 (3.18-18.20)	<0.001
Found out the test results	268	97.8	236	99.6	5.28 (0.63-44.20)	0.12	247	98.8	1.84 (0.46-7.45)	0.39

If by chance is infected with HIV he/she will inform his/her spouse/regular sexual partner	344	90.5	244	90.4	0.98 (0.58-1.67)	0.95	264	97.8	4.60 (1.91-11.09)	0.001
If by chance is infected with HIV he/she will inform his/her IDU partners	352	92.6	254	94.1	1.26 (0.67-2.38)	0.47	265	98.1	4.22 (1.61-11.06)	<0.01
Will take an HIV test if it is free and is held in a state/government facility	241	63.4	199	73.7	1.62 (1.15-2.28)	<0.01	260	96.3	14.99 (7.71-29.16)	<0.001
From which of the below listed sources did he/she get information about HIV/AIDS?										
Radio	6	1.6	2	0.8	2.15 (0.43-10.75)	0.35	2	0.7	2.18 (0.44-10.89)	0.34
TV	202	54.0	74	27.8	3.05 (2.18-4.27)	<0.001	130	48.3	1.26 (0.92-1.72)	0.16
Magazines/Newspapers	36	9.6	1	0.4	28.23 (3.84-207.20)	0.001	2	0.7	14.22 (3.39-59.59)	<0.001
Booklets/Other printed information materials	18	4.8	9	3.4	1.44 (0.64-3.26)	0.39	45	16.7	0.25 (0.14-0.45)	<0.001
Healthcare workers	20	5.3	3	1.1	4.95 (1.46-16.84)	0.01	37	13.8	0.35 (0.20-0.63)	<0.001
School/Teachers	10	2.7	0	0.0	-	-	2	0.7	3.67 (0.80-16.88)	0.10
Friends/Acquaintance/Relatives/ Colleagues	191	51.1	155	64.7	0.75 (0.54-1.03)	0.07	174	64.7	0.57 (0.41-0.79)	0.001
Non-governmental organizations (NGO) representatives/Social workers	112	29.9	98	36.8	0.73 (0.52-1.02)	0.07	129	48.0	0.46 (0.33-0.64)	<0.001
Billboards/Street Advertising	9	2.4	0	0.0	-	-	1	0.4	6.60 (0.83-52.47)	0.07
Internet	75	20.1	45	16.9	1.23 (0.82-1.85)	0.32	115	42.8	0.34 (0.24-0.48)	<0.001
Other	11	2.9	9	3.4	0.86 (0.35-2.12)	0.75	1	0.4	8.12 (1.04-63.29)	0.04

Table H2.2 Knowledge and Attitude towards HIV/AIDS and Self-evaluation of Risks by cities

Characteristics	Tbilisi[1]		Telavi		OR; 95% CI	*p*	Batumi		OR; 95% CI	*p*
	N	%	N	%			N	%		
Has heard about HIV infection	309	81.3	224	83.0	1.12 (0.74-1.68)	0.59	254	94.1	3.65 (2.07-6.43)	<0.001
Has heard about AIDS disease	353	92.9	268	99.3	10.25 (2.42-43.48)	<0.01	265	98.1	4.05 (1.54-10.67)	<0.01
Has heard of someone who is infected with HIV, has AIDS or died of AIDS	144	38.5	106	39.6	1.05 (0.76-1.44)	0.79	131	49.2	1.55 (1.13-2.13)	<0.01
Has a close relative or a close friend who is infected with HIV, has AIDS or died of AIDS	98	68.1	46	43.4	0.36 (0.21-0.61)	<0.001	110	84.0	2.46 (1.37-4.41)	<0.01
Thinks that has risk of infecting with HIV	238	63.6	185	69.0	1.28 (0.91-1.78)	0.16	165	62.0	0.93 (0.67-1.29)	0.68
The risk of transmitting HIV infection (that causes AIDS) can be reduced by having one uninfected and devoted sexual partner	265	70.9	252	94.0	6.48 (3.73-11.26)	<0.001	246	92.5	5.06 (3.05-8.40)	<0.001
The risk of transmitting HIV infection can be reduced by using condoms during each sexual contact	318	85.0	243	90.7	1.71 (1.04-2.82)	0.03	242	91.0	1.78 (1.07-2.95)	0.03
A healthy-looking person can be infected with HIV that causes AIDS	281	75.1	219	81.7	1.48 (1.00-2.18)	0.5	180	67.7	0.69 (0.49-0.98)	0.04
HIV infection can be transmitted as a result of a mosquito's bite	96	25.7	85	31.7	1.35 (0.95-1.90)	0.09	37	13.9	0.47 (0.31-0.71)	<0.001
One can get infected by sharing food with a person infected with HIV	30	8.0	19	7.1	0.87 (0.48-1.59)	0.66	25	9.4	1.19 (0.68-2.07)	0.54
One can get infected with HIV by using a needle/syringe used by someone else	357	95.5	261	97.4	1.78 (0.73-4.34)	0.21	175	65.8	0.09 (0.05-0.16)	<0.001
One can get infected with HIV by using shared injection device	327	87.4	257	95.9	3.36 (1.71-6.60)	<0.001	175	65.8	0.28 (0.19-0.41)	<0.001

(utensil, spoon, cotton/filter), or water previously touched by a needle/syringe used by someone else										
One can get infected with HIV by using the drug solution prepared without his/her presence from the container	311	83.2	250	93.3	2.81 (1.62-4.87)	<0.001	162	60.9	0.32 (0.22-0.45)	<0.001
A drug user can protect oneself from getting infected by switching to noninjection drugs	269	71.9	225	84.0	2.04 (1.37-3.04)	<0.001	145	54.5	0.47 (0.34-0.65)	<0.001
HIV infection can be transferred from HIV-infected mother to her fetus or child	198	52.9	158	59.0	1.28 (0.93-1.75)	0.13	140	52.6	0.99 (0.72-1.35)	0.94
It is possible to take a free and confidential test in your district (city) to reveal HIV-infection	202	54.0	256	95.5	18.16 (9.83-33.55)	<0.001	211	79.3	3.27 (2.28-4.68)	<0.001
Knows where to apply in case he/she wishes to take an HIV test	311	83.2	261	97.4	7.55 (3.40-16.78)	<0.001	219	82.3	0.94 (0.62-1.43)	0.78
Knows where to apply to take a free HIV test	258	83.0	256	98.1	10.52 (4.14-26.74)	<0.001	195	89.0	1.67 (0.99-2.80)	0.05
Has ever taken an HIV test	286	76.5	234	87.3	2.12 (1.37-3.26)	0.001	249	93.6	4.51 (2.61-7.78)	<0.001
The very last HIV test he/she took was within the last 1 year	70	19.5	166	63.4	7.14 (4.97-10.26)	<0.001	144	55.2	5.08 (3.56-7.26)	<0.001
Took the test on his/her own initiative	230	84.2	209	94.6	3.26 (1.67-6.34)	0.001	220	91.3	1.96 (1.13-3.41)	0.02
Found out the test results	268	97.8	221	100.0	-	0.99	241	98.8	1.80 (0.44-7.27)	0.41
If by chance is infected with HIV he/she will inform his/her spouse/regular sexual partner	344	90.5	262	97.0	3.43 (1.57-7.50)	<0.01	233	86.3	0.66 (0.41-1.07)	0.09
If by chance is infected with HIV he/she will inform his/her IDU partners	352	92.6	262	97.0	2.61 (1.17-5.81)	0.02	228	84.4	0.43 (0.26-0.72)	0.001

Will take an HIV test if it is free and is held in a state/government facility	241	63.4	214	79.3	2.20 (1.54-3.16)	<0.001	131	48.5	0.54 (0.40-0.75)	<0.001
From which of the below listed sources did he/she get information about HIV/AIDS?										
Radio	6	1.6	21	7.8	0.19 (0.08-0.48)	<0.001	2	0.8	2.15 (0.43-10.75)	0.35
TV	202	54.0	113	48.3	1.61 (1.17-2.21)	<0.01	35	13.2	7.75 (5.15-11.67)	<0.001
Magazines/Newspapers	36	9.6	19	7.1	1.40 (0.78-2.49)	0.26	5	1.9	5.56 (2.15-14.37)	<0.001
Booklets/Other printed information materials	18	4.8	97	36.2	0.09 (0.05-0.15)	<0.001	36	13.5	0.32 (0.18-0.58)	<0.001
Healthcare workers	20	5.3	29	10.8	0.47 (0.26-0.84)	0.01	125	47.0	0.06 (0.04-0.11)	<0.001
School/Teachers	10	2.7	4	1.5	1.81 (0.56-5.84)	0.32	8	3.0	0.89 (0.35-2.28)	0.80
Friends/Acquaintance/Relatives/Colleagues	191	51.1	108	40.3	1.55 (1.13-2.12)	<0.01	147	55.3	0.84 (0.62-1.16)	0.29
Non-governmental organizations (NGO) representatives/Social workers	112	29.9	208	77.6	0.12 (0.09-0.18)	<0.001	175	65.8	0.22 (0.16-0.31)	<0.001
Billboards/Street advertising	9	2.4	4	1.5	1.63 (0.50-5.34)	0.42	3	1.1	2.16 (0.58-8.06)	0.25
Internet	75	20.1	50	18.7	1.09 (0.73-1.63)	0.66	37	13.9	1.55 (1.01-2.39)	0.04
Other	11	2.9	6	2.2	1.32 (0.48-3.62)	0.59	1	0.4	8.03 (1.03-62.58)	0.04

Table H2.3. Knowledge and Attitude towards HIV/AIDS and Self-evaluation of Risks by cities

Characteristics	Tbilisi[1]		Zugdidi		OR; 95% CI	*p*	Kutaisi		OR; 95% CI	*p*
	N	%	N	%			N	%		
Has heard about HIV infection	309	81.3	254	92.4	2.78 (1.66-4.65)	<0.001	169	62.6	0.38 (0.27-0.55)	<0.001
Has heard about AIDS disease	353	92.9	253	92.0	0.88 (0.49-1.58)	0.67	267	98.9	6.80 (2.04-22.68)	<0.01
Has heard of someone who is infected with HIV, has AIDS or died of AIDS	144	38.5	149	58.2	2.23 (1.61-3.08)	<0.001	151	56.3	2.06 (1.50-2.84)	<0.001
Has a close relative or a close friend who is infected with HIV, has AIDS or died of AIDS	98	68.1	86	57.7	0.64 (0.40-1.03)	0.07	44	29.1	0.19 (0.12-0.32)	<0.001
Thinks that has risk of infecting with HIV	238	63.6	192	75.0	1.71 (1.20-2.44)	<0.01	160	59.7	0.85 (0.61-1.17)	0.31
The risk of transmitting HIV infection (that causes AIDS) can be reduced by having one uninfected and devoted sexual partner	265	70.9	232	90.6	3.98 (2.47-6.40)	<0.001	227	84.7	2.28 (1.53-3.40)	<0.001
The risk of transmitting HIV infection can be reduced by using condoms during each sexual contact	318	85.0	244	85.3	3.58 (1.88-6.83)	<0.001	255	95.1	3.45 (1.85-6.46)	<0.001
A healthy looking person can be infected with HIV that causes AIDS	281	75.1	213	83.2	1.64 (1.10-2.45)	0.02	168	62.7	0.56 (0.40-0.78)	0.001
HIV infection can be transmitted as a result of a mosquito's bite	96	25.7	38	14.8	0.51 (0.33-0.76)	0.001	21	7.8	0.25 (0.15-0.41)	<0.001
One can get infected by sharing food with a person infected with HIV	30	8.0	20	7.8	0.97 (0.54-1.75)	0.93	18	6.7	0.83 (0.45-1.51)	0.54
One can get infected with HIV by using a needle/syringe used by someone else	357	95.5	254	99.2	6.05 (1.38-26.41)	0.02	257	95.9	1.11 (0.51-2.42)	0.79
One can get infected with HIV by using shared injection device (utensil, spoon, cotton/filter), or water	327	87.4	249	97.3	5.11 (2.27-11.50)	<0.001	161	60.1	0.22 (0.15-0.32)	<0.001

previously touched by a needle/syringe used by someone else										
One can get infected with HIV by using the drug solution prepared without his/her presence from the container	311	83.2	243	94.9	3.79 (2.04-7.04)	<0.001	122	45.5	0.17 (0.12-0.24)	<0.001
A drug user can protect oneself from getting infected by switching to noninjection drugs	269	71.9	206	80.5	1.61 (1.10-2.36)	0.01	143	53.4	0.45 (0.32-0.62)	<0.001
HIV infection can be transferred from HIV-infected mother to her fetus or child	198	52.9	147	57.4	1.20 (0.87-1.65)	0.27	84	31.3	0.41 (0.29-0.56)	<0.001
It is possible to take a free and confidential test in your district (city) to reveal HIV-infection	202	54.0	243	94.9	15.92 (8.79-28.82)	<0.001	180	67.2	1.74 (1.26-2.41)	0.001
Knows where to apply in case he/she wishes to take an HIV test	311	83.2	244	95.3	4.12 (2.17-7.81)	<0.001	193	72.0	0.52 (0.36-0.76)	0.001
Knows where to apply to take a free HIV test	258	83.0	238	97.5	8.15 (3.44-19.30)	<0.001	187	96.9	6.40 (2.70-15.20)	<0.001
Has ever taken an HIV test	286	76.5	223	97.1	2.08 (1.34-3.22)	<0.001	191	71.3	0.76 (0.53-1.09)	0.14
The very last HIV test he/she took was within the last 1 year	70	19.5	136	54.2	4.88 (3.41-7.00)	<0.001	61	25.5	1.41 (0.96-2.09)	0.08
Took the test on his/her own initiative	230	84.2	209	97.7	7.81 (3.04-20.10)	<0.001	157	87.2	1.28 (0.74-2.20)	0.38
Found out the test results	268	97.8	210	98.1	1.17 (0.33-4.22)	0.80	165	91.7	0.25 (0.09-0.65)	<0.01
If by chance is infected with HIV he/she will inform his/her spouse/regular sexual partner	344	90.5	252	91.6	1.15 (0.66-1.98)	0.62	205	75.9	0.33 (0.21-0.51)	<0.001
If by chance is infected with HIV he/she will inform his/her IDU partners	352	92.6	252	91.6	0.87 (0.49-1.55)	0.64	144	53.3	0.09 (0.06-0.14)	<0.001
Will take an HIV test if it is free and is held in a state/government facility	241	63.4	246	89.5	4.89 (3.16-7.58)	<0.001	179	66.3	1.14 (0.82-1.57)	0.45

From which of the below listed sources did he/she get information about HIV/AIDS?										
Radio	6	1.6	44	17.2	0.08 (0.03-0.19)	<0.001	7	2.6	0.61 (0.20-1.83)	0.38
TV	202	54.0	155	60.5	0.76 (0.55-1.06)	0.10	142	53.0	1.04 (0.76-1.43)	0.80
Magazines/Newspapers	36	9.6	25	9.8	0.98 (0.57-1.68)	0.95	32	11.9	0.79 (0.47-1.30)	0.35
Booklets/Other printed information materials	18	4.8	31	12.1	0.37 (0.20-0.67)	0.001	42	15.7	0.27 (0.15-0.48)	<0.001
Healthcare workers	20	5.3	39	15.2	0.31 (0.18-0.55)	<0.001	68	25.4	0.17 (0.10-0.28)	<0.001
School/Teachers	10	2.7	3	1.2	2.32 (0.63-8.50)	0.20	8	3.0	0.89 (0.35-2.29)	0.81
Friends/Acquaintance/Relatives/Colleagues	191	51.1	149	58.2	0.75 (0.54-1.03)	0.09	105	39.2	1.62 (1.18-2.23)	<0.01
Non-governmental organizations (NGO) representatives/Social workers	112	29.9	73	28.5	1.07 (0.75-1.52)	0.70	122	45.5	0.51 (0.37-0.71)	<0.001
Billboards/Street Advertising	9	2.4	5	2.0	1.24 (0.41-3.74)	0.71	12	4.5	0.53 (0.22-1.27)	0.15
Internet	75	20.1	96	37.5	0.42 (0.29-0.60)	<0.001	130	48.5	0.27 (0.19-0.38)	<0.001
Other	11	2.9	5	2.0	1.52 (0.52-4.43)	0.44	1	0.4	8.09 (1.04-63.05)	<0.05

Table H3. Knowledge and Attitude towards HIV/AIDS and Self-evaluation of Risks by age

Characteristics	≤35 years old		>35 years old		OR; 95% CI	*p*
	N	%	N	%		
Has heard about HIV infection	339	77.9	1399	89.1	2.32 (1.76-3.06)	<0.001
Has heard about AIDS disease	417	95.5	1524	97.1	1.43 (0.82-2.49)	0.20
Has heard of someone who is infected with HIV, has AIDS or died of AIDS	158	37.5	704	45.5	1.39 (1.12-1.74)	0.003
Has a close relative or a close friend who is infected with HIV, has AIDS or died of AIDS	87	55.1	426	60.5	1.25 (0.88-1.77)	0.20
Thinks that has risk of infecting with HIV	292	69.4	1088	70.4	1.05 (0.83-1.33)	0.68
The risk of transmitting HIV infection (that causes AIDS) can be reduced by having one uninfected and devoted sexual partner	371	88.1	1362	88.1	0.99 (0.71-1.39)	0.98
The risk of transmitting HIV infection can be reduced by using condoms during each sexual contact	390	92.6	1420	91.8	0.90 (0.59-1.35)	0.59
A healthy looking person can be infected with HIV that causes AIDS	305	72.4	1197	77.4	1.30 (1.02-1.67)	0.03
HIV infection can be transmitted as a result of a mosquito's bite	55	13.1	270	17.5	1.41 (1.03-1.92)	0.03
One can get infected by sharing food with a person infected with HIV	23	5.5	114	7.4	1.38 (0.87-2.19)	0.17
One can get infected with HIV by using a needle/syringe used by someone else	390	92.6	1436	92.9	1.04 (0.69-1.57)	0.86
One can get infected with HIV by using shared injection device (utensil, spoon, cotton/filter), or water previously touched by a needle/syringe used by someone else	336	79.8	1334	86.3	1.59 (1.21-2.10)	<0.01
One can get infected with HIV by using the drug solution prepared without his/her presence from the container	317	75.3	1255	81.2	1.41 (1.10-1.83)	<0.01
A drug user can protect oneself from getting infected by switching to noninjection drugs	292	69.4	1151	74.5	1.29 (1.02-1.63)	0.04

HIV infection can be transferred from HIV-infected mother to her fetus or child	225	53.4	901	58.3	1.22 (0.98-1.51)	0.07
It is possible to take a free and confidential test in your district (city) to reveal HIV-infection	318	75.5	1273	82.3	1.51 (1.17-1.95)	<0.01
Knows where to apply in case he/she wishes to take an HIV test	351	83.4	1406	90.9	2.00 (1.47-2.73)	<0.001
Knows where to apply to take a free HIV test	337	96.0	1314	93.5	0.59 (0.33-1.05)	0.07
Has ever taken an HIV test	333	79.1	1354	87.6	1.86 (1.41-2.46)	<0.001
The very last HIV test he/she took was within the last 1 year	150	37.6	602	40.1	1.11 (0.88-1.39)	0.36
Took the test on his/her own initiative	295	93.1	1197	92.2	0.88 (0.55-1.43)	0.61
Found out the test results	308	97.2	1280	98.2	1.63 (0.74-3.55)	0.22
If by chance is infected with HIV he/she will inform his/her spouse/regular sexual partner	363	83.4	1441	91.8	2.22 (1.62-3.02)	<0.001
If by chance is infected with HIV he/she will inform his/her IDU partners	341	78.4	1416	90.2	2.53 (1.91-3.36)	<0.001
Will take an HIV test if it is free and is held in a state/government facility	296	68.0	1174	74.8	1.39 (1.10-1.75)	<0.01
From which of the below listed sources did he/she get information about HIV/AIDS?						
Radio	15	3.6	69	4.5	0.79 (0.45-1.40)	0.42
TV	143	34.0	708	45.8	0.61 (0.49-0.76)	<0.001
Magazines/Newspapers	21	5.0	99	6.4	0.77 (0.47-1.25)	0.28
Booklets/Other printed information materials	61	14.5	217	14.0	1.04 (0.76-1.41)	0.81
Healthcare workers	71	16.9	250	16.2	1.05 (0.79-1.40)	0.73
School/Teachers	13	3.1	22	1.4	2.21 (1.10-4.42)	0.02
Friends/Acquaintance/Relatives/Colleagues	228	54.2	801	51.8	1.10 (0.88-1.36)	0.39
Non-governmental organizations (NGO) representatives/Social workers	190	45.1	727	47.0	0.93 (0.75-1.15)	0.49
Billboards/Street Advertising	9	2.1	25	1.6	1.33 (0.62-2.87)	0.47
Internet	180	42.8	368	23.8	2.39 (1.91-3.00)	<0.001
Other	8	1.9	26	1.7	1.13 (0.51-2.52)	0.76

Table H4. Knowledge and Attitude towards HIV/AIDS and Self-evaluation of Risks by undergoing substitution therapy

Characteristics	People who do not undergo substitution therapy		People who undergo substitution with methadone/suboxone		OR; 95% CI	*p*
	N	%	N	%		
Has heard about HIV infection	1355	86.4	383	87.8	1.14 (0.83-1.57)	0.42
Has heard about AIDS disease	1526	97.3	415	95.2	0.56 (0.33-0.95)	0.03
Has heard of someone who is infected with HIV, has AIDS or died of AIDS	613	39.9	249	57.9	2.07 (1.67-2.58)	<0.001
Has a close relative or a close friend who is infected with HIV, has AIDS or died of AIDS	349	56.9	164	65.9	1.46 (1.07-1.98)	0.01
Thinks that has risk of infecting with HIV	1075	69.9	305	70.9	1.05 (0.83-1.32)	0.69
The risk of transmitting HIV infection (that causes AIDS) can be reduced by having one uninfected and devoted sexual partner	1371	89.2	362	84.2	0.65 (0.48-0.87)	<0.01
The risk of transmitting HIV infection can be reduced by using condoms during each sexual contact	1420	92.4	390	90.7	0.80 (0.55-1.17)	0.25
A healthy-looking person can be infected with HIV that causes AIDS	1166	75.9	336	78.1	1.14 (0.88-1.47)	0.33
HIV infection can be transmitted as a result of a mosquito's bite	233	15.2	92	21.4	1.52 (1.16-1.99)	<0.01
One can get infected by sharing food with a person infected with HIV	112	7.3	25	5.8	0.78 (0.50-1.23)	0.29
One can get infected with HIV by using a needle/syringe used by someone else	1437	93.5	389	90.5	0.66 (0.45-0.97)	0.03
One can get infected with HIV by using shared injection device (utensil, spoon, cotton/filter), or water previously touched by a needle/syringe used by someone else	1326	86.3	344	80.0	0.64 (0.48-0.84)	<0.01
One can get infected with HIV by using the drug solution prepared without his/her presence from the container	1253	81.5	319	74.2	0.65 (0.51-0.84)	0.001
A drug user can protect oneself from getting infected by switching to noninjection drugs	1140	74.2	303	70.5	0.83 (0.66-1.05)	0.12

HIV infection can be transferred from HIV-infected mother to her fetus or child	878	57.1	248	57.7	1.02 (0.82-1.27)	0.84
It is possible to take a free and confidential test in your district (city) to reveal HIV-infection	1252	81.5	339	78.8	0.85 (0.65-1.11)	0.22
Knows where to apply in case he/she wishes to take an HIV test	1378	89.7	379	88.1	0.86 (0.61-1.20)	0.37
Knows where to apply to take a free HIV test	1300	94.3	351	92.6	0.75 (0.48-1.18)	0.21
Has ever taken an HIV test	1303	84.8	384	89.3	1.50 (1.07-2.10)	0.02
The very last HIV test he/she took was within the last 1 year	572	38.5	180	43.5	1.23 (0.99-1.53)	0.07
Took the test on his/her own initiative	1156	92.7	336	91.3	0.83 (0.54-1.26)	0.37
Found out the test results	1230	98.3	358	97.0	0.56 (0.26-1.16)	0.11
If by chance is infected with HIV he/she will inform his/her spouse/regular sexual partner	1418	90.4	389	88.5	0.82 (0.59-1.15)	0.26
If by chance is infected with HIV he/she will inform his/her IDU partners	1384	88.2	373	85.6	0.79 (0.58-1.08)	0.14
Will take an HIV test if it is free and is held in a state/government facility	1160	73.9	310	71.1	0.87 (0.68-1.10)	0.24
From which of the below listed sources did he/she get information about HIV/AIDS?						
Radio	63	4.1	21	4.9	0.83 (0.50-1.38)	0.48
TV	654	42.6	197	45.8	0.88 (0.71-1.09)	0.23
Magazines/Newspapers	96	6.2	24	5.6	1.13 (0.71-1.79)	0.61
Booklets/Other printed information materials	241	15.7	37	8.6	1.97 (1.37-2.84)	<0.001
Healthcare workers	238	15.5	83	19.3	0.77 (0.58-1.01)	0.06
School/Teachers	29	1.9	6	1.4	1.36 (0.56-3.29)	0.50
Friends/Acquaintance/Relatives/Colleagues	809	52.6	220	51.2	1.06 (0.86-1.31)	0.59
Non-governmental organizations (NGO) representatives/Social workers	732	47.6	185	43.0	1.20 (0.97-1.49)	0.09
Billboards/Street Advertising	28	1.8	6	1.4	1.31 (0.54-3.19)	0.55
Internet	437	28.4	111	25.8	1.14 (0.90-1.45)	0.28
Other	24	1.6	10	2.3	0.67 (0.32-1.40)	0.28

Table 1. Use of prevention programs and social impact

Characteristics	N	%
Has received the following products and/or information for free in Georgia during the last year		
Brochure/pamphlet/booklet on AIDS	768	39.6
Educational information on AIDS	711	36.6
Condoms	971	50.1
Syringe/needle/butterfly needle	1211	62.4
Other	242	12.5
Does he/she know where to apply for the "syringes and needles program" in Georgia		
Yes	1519	77.2
No	436	22.2
No response	12	0.6
The place of drug injection		
Street	72	3.6
Apartment	1632	81.4
Automobile	344	17.2
Entrance hall	73	3.6
Non-residential space (garage, basement, attic, elevator, construction, abandoned house, ruins)	251	12.5
Open space (forest, riverbank, seashore)	128	6.4
The same place where I buy drugs	37	1.8
Wherever it is possible	267	13.3
Other	9	0.4
Coverage with the prevention programs[5]		
Yes	930	46.4
No	802	53.6
Minimal coverage with the prevention programs[6]		
Yes	591	29.5
No	1414	70.5
Full coverage with the prevention programs[7]		
Yes	609	30.4
No	1396	69.6
The two people who have the greatest impact on continuing drug use		
Nobody	1749	87.2
Needle partner	264	13.2
The two people who have the greatest impact on ceasing drug use		
Nobody	1152	57.5
Spouse/sexual partner	529	26.4

[5] Knows where to get tested for HIV and has received sterile injection devices (needle/syringe/butterfly needle) and condoms for free during the last year

[6] Knows where to get tested for HIV and has received sterile injection devices (needle/syringe/butterfly needle) or condoms or information material (brochure/pamphlet/booklet) or qualified educational information on AIDS free of charge during the last year

[7] Knows where to get tested for HIV and has received sterile injection devices (needle/syringe/butterfly needle) and condoms and informational material (brochure/pamphlet/booklet) or qualified educational information on AIDS free of charge during the last year

Table 2. Use of treatment programs

Characteristics	N	%
Cessation of drug use without medical help		
Yes	501	25.0
No	1024	51.1
Had no "cold turkey symptoms"	344	17.2
Don't know	6	0.3
No response	130	6.5
Has ever been treated/received specific help for drug use		
Yes	749	37.4
No	1250	62.3
No response	6	0.3
Referral to a medical facility, specialized center, for treatment or specific help for drug use during the last 12 months		
Yes	546	72.2
No	197	26.1
No response	13	1.7
Receiving treatment/specific help for drug use during the last 12 months		
Currently undergoing treatment	440	78.7
Has undergone treatment during the last 12 months, but is not currently receiving treatment	90	16.1
No	15	2.7
No response	14	2.5
Types of treatment or specific help during the last 12 months		
Consultation	11	2.1
Self-help groups	0	0
Detoxification with methadone/suboxone	65	12.3
Substitution with methadone/suboxone	436	82.3
Detoxification with other drugs	8	1.5
Detoxification without drugs	14	2.6
Psycho-social rehabilitation	7	1.3
At home	3	0.6
The city where the treatment took place		
Tbilisi	156	32.6
Gori	56	11.7
Telavi	41	8.6
Batumi	74	15.4
Zugdidi	58	12.1
Kutaisi	86	18.0
No response	8	0.4
The desire to receive other treatment or specific help during the last 12 months		
Yes (Wanted, but didn't/couldn't get it), detoxification	25	4.9
Yes (Wanted, but didn't/couldn't get it), substitution with methadone/suboxone	14	2.7
No	438	85.8
Doesn't know	13	2.5

No response	22	4.3
The reason why he/she did not/could not receive treatment or specific help during the last 12 months		
Had no desire	888	44.3
It is very expensive/Didn't have enough money	216	10.8
Because of location	83	4.1
I applied, but there were not enough places	31	1.5
I applied, but the conditions (except the financial ones) were not satisfactory	15	0.7
Couldn't find good specialist/doctor	12	0.6
Other	149	7.4
Don't know	84	4.2
No response	23	1.1

Table I3. Use of prevention programs and social impact, by cities

Characteristics	Tbilisi [8]		Gori		OR; 95% CI	*p*	Rustavi		OR; 95% CI	*p*
	N	%	N	%			N	%		
Has received the following products and/or information for free in Georgia during the last year										
Brochure/pamphlet/booklet on AIDS	88	24.0	25	9.4	0.33 (0.20-0.53)	<0.001	136	50.6	3.23 (2.30-4.53)	<0.001
Educational information on AIDS	68	18.6	22	8.3	0.39 (0.24-0.66)	<0.001	136	50.6	4.48 (3.14-6.39)	<0.001
Condoms	119	32.5	90	34.0	1.07 (0.76-1.49)	0.703	136	50.6	2.12 (1.53-2.93)	<0.001
Syringe/needle/butterfly needle	157	42.9	210	79.2	5.08 (3.54-7.30)	<0.001	136	50.6	1.36 (0.99-1.87)	0.056
Other	34	9.3	15	5.7	0.59 (0.31-1.09)	0.096	32	11.9	1.32 (0.79-2.20)	0.289
Knows where to apply for the "syringes and needles program" in Georgia	189	50.1	236	89.1	8.09 (5.24-12.51)	<0.001	265	98.1	52.72 (21.27-130.65)	<0.001
The place of drug injection										
Street	21	5.5	16	5.9	1.08 (0.55-2.10)	0.828	2	0.7	0.13 (0.30-0.55)	0.006
Apartment	318	83.7	234	86.7	1.27 (0.81-1.98)	0.296	234	86.7	1.27 (0.81-1.98)	0.296
Automobile	72	18.9	48	17.8	0.93 (0.62-1.38)	0.705	25	9.3	0.44 (0.27-0.71)	0.001
Entrance hall	36	9.5	2	0.7	0.07 (0.12-0.30)	<0.001	1	0.4	0.04 (0.01-0.26)	0.001
Non-residential space (garage, basement, attic, elevator, construction, abandoned house, ruins)	60	15.8	16	5.9	0.34 (0.19-0.60)	<0.001	21	7.8	0.45 (0.27-0.76)	0.003
Open space (forest, riverbank, seashore)	14	3.7	7	2.6	0.70 (0.28-1.75)	0.440	25	9.3	2.67 (1.36-5.23)	0.004
The same place where I buy drugs	5	1.3	2	0.7	0.56 (0.11-2.91)	0.490	1	0.4	0.28 (0.03-2.40)	0.245
Wherever it is possible	77	20.3	26	9.6	0.42 (0.26-0.67)	<0.001	49	18.1	0.87 (0.59-1.30)	0.502

[8] Tbilisi represents the reference group

Other	2	0.5	2	0.5	1.41(0.20-10.08)	0.732	0	0	0	0.995
Coverage with the prevention programs	113	29.7	88	32.6	1.14 (0.82-1.60)	0.43	135	50.0	2.36 (1.71-3.27)	<0.001
Minimal coverage with the prevention programs	110	28.9	192	71.1	6.04 (4.28-8.52)	<0.001	4	1.5	0.03 (0.01-0.10)	<0.001
Full coverage with the prevention programs	47	12.4	17	6.3	0.48 (0.27-0.85)	0.01	133	49.3	6.88 (4.67-10.13)	<0.001
The two people who have the greatest impact on continuing drug use										
Nobody	354	98.9	261	98.1	0.59 (0.16-2.22)	0.435	265	100	-	0.995
Needle partner	28	12.0	10	3.8	0.63 (0.30-1.35)	0.234	9	20.4	1.83 (0.80-4.20)	0.154
The two people who have the greatest impact on ceasing drug use										
Nobody	138	36.5	233	86.3	10.95 (7.30-16.42)	<0.001	198	73.9	4.92 (3.49-6.94)	<0.001
Spouse/sexual partner	131	41.3	39	60.0	2.13 (1.24-3.67)	0.006	64	38.3	0.88 (0.60-1.29)	0.522

Table I3.1. Use of prevention programs and social impact, by cities

Characteristics	Tbilisi [1]		Telavi		OR; 95% CI	*p*	Batumi		OR; 95% CI	*p*
	N	%	N	%				%		
Has received the following products and/or information for free in Georgia during the last year										
Brochure/pamphlet/booklet on AIDS	88	24.0	178	67.9	6.69 (4.70-9.53)	<0.001	95	36.0	1.778 (1.25-2.51)	0.001
Educational information on AIDS	68	18.6	173	66.0	8.52 (5.90-12.29)	<0.001	107	40.5	2.98 (2.08-4.28)	<0.001
Condoms	119	32.5	200	76.3	6.70 (4.67-9.59)	<0.001	170	64.4	3.75 (2.69-5.24)	<0.001
Syringe/needle/butterfly needle	157	42.9	217	82.8	6.42 (4.38-9.41)	<0.001	177	67.0	2.71 (1.95-3.77)	<0.001
Other	34	9.3	86	32.8	4.77 (3.08-7.39)	<0.001	31	11.7	1.30 (0.78-2.17)	0.319
Knows where to apply for the "syringes and needles program" in Georgia	189	50.1	232	86.9	6.59 (4.38-9.92)	<0.001	192	72.2	2.58 (1.85-3.61)	<0.001
The place of drug injection										
Street	21	5.5	3	1.1	0.19 (0.06-0.65)	0.008	7	2.6	0.46 (1.19-1.09)	0.076
Apartment	318	83.7	214	79.3	0.75 (0.50-1.11)	0.150	196	72.6	0.52 (0.35-0.76)	0.001
Automobile	72	18.9	35	13.0	0.64 (0.41-0.99)	0.044	51	18.9	1.0 (0.67-1.48)	0.985
Entrance hall	36	9.5	4	1.5	0.14 (0.05-0.41)	<0.001	13	4.8	0.48 (0.25-0.93)	0.029
Non-residential space (garage, basement, attic, elevator, construction, abandoned house, ruins)	60	15.8	14	5.2	0.29 (0.16-0.53)	<0.001	57	21.1	1.43 (0.95-2.13)	0.083
Open space (forest, riverbank, seashore)	14	3.7	30	11.1	3.27 (1.70-6.29)	<0.001	23	8.5	2.43 (1.23-4.82)	0.011
The same place where I buy drugs	5	1.3	2	0.7	0.56 (0.11-2.91)	0.49	5	1.9	1.41 (0.41-4.94)	0.586
Wherever it is possible	77	20.3	33	12.2	0.55 (0.52-0.85)	0.008	3	1.1	0.04 (0.01-0.14)	<0.001
Other	2	0.5	4	1.5	2.84 (0.82-15.63)	0.23	0	0	0	0.995

Coverage with the prevention programs	113	29.7	196	72.6	6.26 (4.43-8.85)	<0.001	148	54.8	2.87 (2.07-3.97)	<0.001
Minimal coverage with the prevention programs	110	28.9	61	22.6	0.72 (0.50-1.03)	0.07	101	37.4	1.47 (1.05-2.04)	0.024
Full coverage with the prevention programs	47	12.4	154	57.0	9.41 (6.37-13.88)	<0.001	73	27.0	2.62 (1.75-3.94)	<0.001
The two people who have the greatest impact on continuing drug use										
Nobody	354	98.9	240	90.2	0.10 (0.04-0.30)	<0.001	146	93.0	0.15 (0.05-0.48)	0.001
Needle partner	28	12.0	24	26.7	2.66 (1.44-4.91)	0.002	125	74.0	20.8 (12.32-35.10)	<0.001
The two people who have the greatest impact on ceasing drug use										
Nobody	138	36.5	158	58.5	2.45 (1.78-3.38)	<0.001	184	68.7	3.81 (2.73-5.31)	<0.001
Spouse/sexual partner	131	41.3	49	34.5	0.75 (0.50-1.13)	0.167	81	33.8	0.72 (0.51-1.02)	0.069

Table I3.2. Use of prevention programs and social impact, by cities

Characteristics	Tbilisi [1]		Zugdidi		OR; 95% CI	*p*	Kutaisi		OR; 95% CI	*p*
	N	%	N	%				%		
Has received the following products and/or information for free in Georgia during the last year										
Brochure/pamphlet/booklet on AIDS	88	24	119	48.0	2.91 (2.06-4.12)	<0.001	127	47.7	2.89 (2.06-4.05)	<0.001
Educational information on AIDS	68	18.6	96	38.7	2.77 (1.92-3.99)	<0.001	109	41.0	3.04 (2.12-4.36)	<0.001
Condoms	119	32.5	123	49.6	2.04 (1.47-2.84)	<0.001	133	50.0	2.08 (1.50-2.87)	<0.001
Syringe/needle/butterfly needle	157	42.9	156	62.7	2.23 (1.61-3.11)	<0.001	158	59.4	1.95 (1.41-2.68)	<0.001
Other	34	9.3	18	7.2	0.76 (0.42-1.38)	0.368	26	9.8	1.06 (0.62-1.81)	0.837
Knows where to apply for the "syringes and needles program" in Georgia	189	50.1	242	95.3	20.06 (10.86-37.06)	<0.001	163	60.8	1.54 (1.12-2.12)	0.007
The place of drug injection										
Street	21	5.5	6	2.2	0.38 (0.15-0.96)	0.040	17	6.3	1.15 (0.59-2.22)	0.680
Apartment	318	83.7	197	71.6	0.49 (0.34-0.72)	<0.001	239	88.5	1.50 (0.95-2.39)	0.084
Automobile	72	18.9	52	18.9	1.0 (0.67-1.48)	0.99	61	22.6	1.25 (0.85-1.83)	0.257
Entrance hall	36	9.5	2	0.7	0.07(0.02-0.29)	<0.001	15	5.6	0.56 (0.30-1.05)	0.07
Non-residential space (garage, basement, attic, elevator, construction, abandoned house, ruins)	60	15.8	45	16.4	1.04 (0.68-1.59)	0.843	38	14.1	0.87 (0.56-1.36)	0.547
Open space (forest, riverbank, seashore)	14	3.7	20	7.3	2.05 (1.02-4.13)	0.045	9	3.3	0.90 (0.38-2.11)	0.811
The same place where I buy drugs	5	1.3	2	0.7	0.55 (0.11-2.85)	0.476	20	7.4	6.0 (2.22-16.19)	<0.001

Wherever it is possible	77	20.3	30	10.9	0.48 (0.31-0.76)	0.002	49	18.1	0.87 (0.59-1.30)	0.502
Other	2	0.5	1	0.4	0.69 (0.06-7.64)	0.762	0	0	0	0.995
Coverage with the prevention programs	113	29.7	120	43.6	1.83 (1.32-2.53)	<0.001	130	48.1	2.19 (1.59-3.03)	<0.001
Minimal coverage with the prevention programs	110	28.9	65	23.6	0.76 (0.53-1.08)	0.130	58	21.5	0.67 (0.47-0.97)	0.033
Full coverage with the prevention programs	47	12.4	88	32.0	3.33 (2.24-4.96)	<0.001	97	35.9	3.97 (2.68-5.89)	<0.001
The two people who have the greatest impact on continuing drug use										
Nobody	354	98.9	258	95.6	0.24 (0.08-0.76)	0.015	225	95.7	0.25 (0.08-0.82)	0.022
Needle partner	28	12.0	22	14.6	1.25 (0.68-2.28)	0.468	46	30.5	3.21 (1.90-5.42)	<0.001
The two people who have the greatest impact on ceasing drug use										
Nobody	138	36.5	106	38.7	1.10 (0.80-1.51)	0.571	135	50.6	1.78 (1.29-2.45)	<0.001
Spouse/sexual partner	131	41.3	86	35.8	0.79 (0.56-1.12)	0.188	79	51.3	1.50 (1.02-2.20)	0.042

Table I4.1 Use of treatment programs, by cities

Characteristics	Tbilisi[1]		Gori		OR; 95% CI	*p*	Rustavi		OR; 95% CI	*p*
	N	%	N	%				%		
Cessation of drug use without medical help ("Quitting cold turkey")	108	28.4	78	28.9	1.02 (0.72-1.44)	0.897	59	21.9	0.70 (0.49-1.01)	0.06
Has ever been treated/received specific help for drug use	206	54.2	91	33.7	0.43 (0.31-0.59)	<0.001	39	14.4	0.14 (0.1-0.21)	<0.001
Referral to a medical facility, specialized center, for treatment or specific help for drug use during the last 12 months	129	62.6	63	69.2	1.34 (0.79-2.27)	0.273	29	74.4	1.73 (0.80-3.75)	0.164
Receiving treatment/specific help for drug use during the last 12 months										
Currently undergoing treatment	111	84.4	46	71.9	0.46 (0.22-0.95)	0.036	24	68.6	0.39 (0.17-0.93)	0.033
Has undergone treatment during the last 12 months, but is not currently receiving treatment	16	12.2	17	26.6	2.60 (1.21-5.57)	0.014	5	14.3	1.20 (0.41-3.53)	0.743
No	3	2.3	0	0.0	-	-	1	2.9	6.57 (1.74-24.75)	0.005
Types of treatment or specific help during the last 12 months										
Consultation	0	0	0	0	-	-	5	17.2	-	-
Detoxification with methadone/suboxone	6	4.7	21	33.3	10.1 (3.81-26.67)	<0.001	2	6.9	1.49 (0.29-7.81)	0.634
Substitution with methadone/suboxone	115	90.6	44	69.8	0.24 (0.11-0.54)	0.001	20	69.0	0.23 (0.09-0.62)	0.004
Detoxification with other drugs	2	1.6	0	0	-	-	2	6.9	4.63 (0.62-34.33)	0.134
Detoxification without drugs	2	1.6	1	1.6	1.0 (0.09-11.33)	0.995	3	10.3	7.21 (1.15-45.33)	0.035
Psycho-social rehabilitation	0	0	3	4.8	-	-	3	10.3	-	-
At home	1	0.8	0	0	-	-	0	0	-	-

The reason why he/she did not/could not receive treatment or specific help during the last 12 months										
Had no desire	150	39.5	149	55.2	1.88 (1.38-2.59)	<0.001	99	36.7	0.89 (0.64-1.22)	0.468
It is very expensive/Didn't have enough money	33	8.7	24	8.9	1.23 (0.59-1.78)	0.928	55	20.4	2.69 (1.69-4.28)	<0.001
Because of location	1	0.3	0	0	-	-	57	21.1	101.42 (13.94-737.66)	<0.001
I applied, but there were not enough places	12	3.2	0	0	-	-	3	1.1	0.34 (0.10 -1.23)	0.101
I applied, but the conditions (except the financial ones) were not satisfactory	1	0.3	0	0	-	-	1	0.4	1.41 (0.08-22.62)	0.809
Couldn't find good specialist/doctor	3	0.8	1	0.4	0.47 (0.05-4.51)	0.511	2	0.7	0.94 (0.16-5.65)	0.944
Other	64	16.8	7	2.6	0.13 (0.06-0.29)	<0.001	9	3.3	0.17 (0.08-0.35)	<0.001

Table I4.2 Use of treatment programs, by cities

Characteristics	Tbilisi[1]		Telavi		OR; 95% CI	*p*	Batumi		OR; 95% CI	*p*
	N	%	N	%				%		
Cessation of drug use without medical help ("Quitting cold turkey")	108	28.4	77	28.5	1.02 (0.72-1.44)	0.978	49	18.1	0.56 (0.38-0.81)	0.003
Has ever been treated/received specific help for drug use	206	54.2	61	22.6	0.25 (0.17-0.35)	<0.001	128	47.4	0.76 (0.56-1.04)	0.088
Referral to a medical facility, specialized center, for treatment or specific help for drug use during the last 12 months	129	62.6	47	75.8	1.87 (0.98-3.57)	0.058	95	72.5	1.57 (0.98-2.54)	0.062
Receiving treatment/specific help for drug use during the last 12 months										
Currently undergoing treatment	111	84.4	37	78.7	0.67 (0.29-1.55)	0.347	65	66.3	0.35 (0.19-0.67)	0.001
Has undergone treatment during the last 12 months, but is not currently receiving treatment	16	12.2	7	14.9	1.26 (0.48-3.28)	0.639	25	25.5	2.46 (1.23-4.92)	0.011
No	3	2.3	3	6.4	2.16 (0.47-10.05)	0.324	5	5.1	2.82 (0.82-9.66)	0.098
Types of treatment or specific help during the last 12 months										
Consultation	0	0	0	0	-		5	5.6	-	
Detoxification with methadone/suboxone	6	4.7	5	11.4	2.58 (0.75-8.94)	0.133	12	13.3	3.10 (1.12-8.61)	0.030
Substitution with methadone/suboxone	115	90.6	38	86.4	0.66 (0.23-1.88)	0.438	74	82.2	0.48 (0.22-1.08)	0.076
Detoxification with other drugs	2	1.6	1	2.3	1.45 (0.13-16.43)	0.762	2	2.2	1.42 (0.20-10.28)	0.728
Detoxification without drugs	2	1.6	0	0	-	-	1	1.1	0.70 (0.06-7.86)	0.774
Psycho-social rehabilitation	0	0	0	0	-	-	0	0	-	-

At home	1	0.8	1	2.3	2.93 (0.18-48.87)	0.451	0	0	-	-
The reason why he/she did not/could not receive treatment or specific help during the last 12 months										
Had no desire	150	39.5	151	55.9	1.95 (1.42-2.67)	<0.001	133	49.3	1.49 (1.09-2.04)	0.013
It is very expensive/ Didn't have enough money	33	8.7	53	19.6	2.57 (1.61-4.09)	<0.001	5	1.9	0.198 (0.08-0.51)	0.001
Because of location	1	0.3	13	4.8	19.17 (2.49-147.45)	0.005	7	2.6	10.09 (1.23-82.47)	0.031
I applied, but there were not enough places	12	3.2	3	1.1	0.34 (0.10-1.23)	0.101	6	2.2	0.70 (0.26-1.88)	0.476
I applied, but the conditions (except the financial ones) were not satisfactory	1	0.3	0	0	-	-	6	2.2	8.61 (1.03-71.96)	0.047
Couldn't find good specialist/doctor	3	0.8	0	0	-	-	4	1.5	1.89 (0.42-8.51)	0.407
Other	64	16.8	14	5.2	0.27 (0.15-0.49)	<0.001	12	4.4	0.23 (0.12-0.43)	<0.001

Table I4.3 Use of treatment programs, by cities

Characteristics	Tbilisi[1]		Zugdidi		OR; 95% CI	*p*	Kutaisi		OR; 95% CI	*p*
	N	%	N	%			N	%		
Cessation of drug use without medical help ("Quitting cold turkey")	108	28.4	95	34.5	1.33 (0.95-1.86)	0.095	35	13.0	0.38 (0.25-0.57)	<0.001
Has ever been treated/received specific help for drug use	206	54.2	113	41.1	0.59 (0.43-0.81)	0.001	111	41.1	0.59 (0.43-0.81)	0.001
Referral to a medical facility, specialized center, for treatment or specific help for drug use during the last 12 months	129	62.6	95	84.1	3.15 (1.77-5.61)	<0.001	88	77.9	2.10 (1.24-3.56)	0.006
Receiving treatment/specific help for drug use during the last 12 months										
Currently undergoing treatment	111	84.4	86	90.5	1.72 (0.75-3.97)	0.203	71	79.8	0.71 (0.35-1.43)	0.341
Has undergone treatment during the last 12 months, but is not currently receiving treatment	16	12.2	8	8.4	0.66 (0.27-1.61)	0.364	12	13.5	1.12 (0.50-2.50)	0.782
No	3	2.3	0	0	-	-	3	3.4	2.29 (0.63-8.38)	0.209
Types of treatment or specific help during the last 12 months										
Consultation	0	0	0	0	-	-	1	1.2	-	-
Detoxification with methadone/suboxone	6	4.7	7	7.4	1.62 (0.53-5.0)	0.399	12	14.5	3.41 (1.23-9.48)	0.019
Substitution with methadone/suboxone	115	90.6	77	81.9	0.47 (0.21-1.04)	0.064	68	81.9	0.47 (0.21-1.07)	0.072
Detoxification with other drugs	2	1.6	1	1.1	0.67 (0.06-7.52)	0.747	0	0	-	-
Detoxification without drugs	2	1.6	4	4.3	2.78 (0.50-15.50)	0.244	3	3.6	2.34 (0.34-14.34)	0.357
Psycho-social rehabilitation	0	0	1	1.1	-	-	0	0	-	-
At home	1	0.8	0	0	-	-	1	1.2	1.54 (0.09-24.91)	0.762

The reason why he/she did not/could not receive treatment or specific help during the last 12 months

Had no desire	150	39.5	107	38.9	0.98 (0.71 -1.34)	0.884	99	36.7	0.89 (0.64-1.22)	0.468
It is very expensive/ Didn't have enough money	33	8.7	39	14.2	1.74 (1.06-2.84)	0.028	7	2.6	0.28 (0.12-0.64)	0.003
Because of location	1	0.3	4	1.5	5.59 (0.62-50.33)	0.125	1	0.4	1.41 (0.09-22.62)	0.809
I applied, but there were not enough places	12	3.2	3	1.1	0.34 (0.09-1.21)	0.096	4	1.5	0.46 (0.15-1.45)	0.184
I applied, but the conditions (except the financial ones) were not satisfactory	1	0.3	2	0.7	2.78 (0.25-30.77)	0.405	5	1.9	7.15 (0.83-61.56)	0.073
Couldn't find good specialist/doctor	3	0.8	1	0.4	0.46 (0.05-4.43)	0.501	1	0.4	0.47 (0.05-4.51)	0.511
Other	64	16.8	14	5.1	0.26 (0.14-0.48)	<0.001	29	10.7	0.59 (0.37-0.95)	0.03

Table I5. Use of prevention programs by age

Characteristics	≤35		>35		OR; 95% CI	*p*
	N	%	N	%		
Has ever received the following products and/or information for free in Georgia						
Syringe/needle/butterfly needle	96	43.2	514	62.1	2.15 (1.59-2.90)	<0.001
Naloxone	82	36.9	430	52.1	1.85 (1.37-2.51)	<0.001
Has received the following products and/or information for free in Georgia during the last year						
Brochure/pamphlet/booklet on AIDS	149	35.8	619	40.6	1.23 (0.98-1.53)	0.076
Educational information on AIDS	144	34.6	567	37.2	1.12 (0.89-1.40)	0.331
Condoms	208	50.0	763	50.1	1.0 (0.81-1.24)	0.981
Syringe/needle/butterfly needle	241	57.9	970	63.6	1.27 (1.02-1.58)	0.034
Other	46	11.1	196	12.9	1.19 (0.84-1.67)	0.326
Knows where to apply for the "syringes and needles program" in Georgia	308	72.8	1211	78.4	1.36 (1.06-1.74)	0.015
The place of drug injection						
Street	20	4.6	52	3.3	0.71 (0.42-1.20)	0.202
Apartment	342	78.6	1290	82.2	1.25 (0.96-1.63)	0.093
Automobile	101	23.2	243	15.5	0.61 (0.47-0.79)	<0.001
Entrance hall	24	5.5	49	3.1	0.55 (0.33-0.91)	0.018
Non-residential space (garage, basement, attic, elevator, construction, abandoned house, ruins)	69	15.9	182	11.6	0.70 (0.51-0.94)	0.017
Open space (forest, riverbank, seashore)	33	7.6	95	6.1	0.78 (0.52-1.18)	0.246
The same place where I buy drugs	17	3.9	20	1.3	0.32 (0.16-0.61)	<0.001
Wherever it is possible	81	18.6	186	11.8	0.59 (0.44-0.78)	<0.001

Other	2	0.5	7	0.4	0.97 (0.20-4.68)	0.969
Coverage with the prevention programs	201	46.2	729	46.4	1.00 (0.82-1.25)	0.933
Minimal coverage with the prevention programs	119	27.4	472	30.1	1.14 (0.90-1.45)	0.273
Full coverage with the prevention programs	123	28.3	486	31.0	1.14 (0.90-1.44)	0.282

Table I6. Use of treatment programs by age

Characteristics	≤35		>35		OR; 95% CI	*p*
	N	%	N	%		
Cessation of drug use without medical help ("Quitting cold turkey")	122	28.0	379	24.1	0.82 (0.64-1.04)	0.096
Has ever been treated/received specific help for drug use	124	28.5	625	39.8	1.66 (1.32-2.09)	<0.001
Referral to a medical facility, specialized center, for treatment or specific help for drug use during the last 12 months	92	73.0	454	72.2	0.96 (0.62-1.47)	0.848
Receiving treatment/specific help for drug use during the last 12 months						
Currently undergoing treatment	67	68.4	373	80.9	1.96 (1.21-3.18)	0.006
Has undergone treatment during the last 12 months, but is not currently receiving treatment	22	22.4	68	14.8	0.60 (0.35-1.03)	0.060
No	4	4.1	11	2.4	0.57 (0.18-1.84)	0.346
Types of treatment or specific help during the last 12 months						
Consultation	3	3.4	8	1.8	0.53 (0.14-2.04)	0.347
Detoxification with methadone/suboxone	13	14.6	52	11.8	0.78 (0.41-1.50)	0.460
Substitution with methadone/suboxone	66	74.2	370	83.9	1.82 (1.06-3.11)	0.028
Detoxification with other drugs	2	2.2	6	1.4	0.60 (0.12-3.02)	0.531
Detoxification without drugs	6	6.7	8	1.8	0.26 (0.09-0.76)	0.008
Psycho-social rehabilitation	4	4.5	3	0.7	0.15 (0.03-0.66)	0.004
At home	0	0	3	0.7	-	0.435

Table I7. Use of prevention programs, by employment status

Characteristics	Employed		Unemployed		OR; 95% CI	*p*
	N	%	N	%		
Has received the following products and/or information for free in Georgia during the last year						
Brochure/pamphlet/booklet on AIDS	303	43.0	465	37.6	1.25 (1.04-1.51)	0.019
Educational information on AIDS	275	39.0	436	35.3	1.17 (0.97-1.42)	0.103
Condoms	375	53.6	593	48.0	1.14 (1.04-1.51)	0.02
Syringe/needle/butterfly needle	465	66.0	746	60.4	1.27 (1.05-1.54)	0.014
Other	114	16.2	128	10.4	1.67 (1.27-2.19)	<0.001
Knows where to apply for the "syringes and needles program" in Georgia	557	78.6	962	76.5	1.12 (0.89-1.39)	0.330
Coverage with the prevention programs	365	50.5	565	44.1	1.29 (1.08-1.55)	0.006
Minimal coverage with the prevention programs	228	31.5	363	28.3	1.17 (0.96-1.42)	0.129
Full coverage with the prevention programs	243	33.6	366	28.5	1.27 (1.04-1.54)	0.018

Table I8. Use of treatment programs, by employment status

Characteristics	Employed		Unemployed		OR; 95% CI	*p*
	N	%	N	%		
Cessation of drug use without medical help ("Quitting cold turkey")	189	26.1	312	24.3	1.10 (0.89-1.36)	0.370
Has ever been treated/received specific help for drug use	229	31.7	520	40.6	0.68 (0.56-0.82)	<0.001
Referral to a medical facility, specialized center, for treatment or specific help for drug use during the last 12 months	166	72.5	380	72.2	1.01 (0.71-1.43)	0.945
Receiving treatment/specific help for drug use during the last 12 months						
Currently undergoing treatment	129	76.3	311	79.7	0.82 (0.53-1.26)	0.365
Has undergone treatment during the last 12 months, but is not currently receiving treatment	33	19.5	57	14.6	1.42 (0.88-2.28)	0.147
No	2	1.2	3	3.3	0.35 (0.08-1.56)	0.149
Types of treatment or specific help during the last 12 months						
Consultation	3	1.9	8	2.2	0.85 (0.22-3.24)	0.811
Detoxification with methadone/suboxone	25	15.4	40	10.9	1.50 (0.87-2.56)	0.140
Substitution with methadone/suboxone	124	76.5	312	84.8	0.59 (0.34-0.93)	0.022
Detoxification with other drugs	0	0	8	2.2	-	0.06
Detoxification without drugs	7	4.3	7	1.9	2.33 (0.80-6.75)	0.110
Psycho-social rehabilitation	3	1.9	4	1.1	1.72 (0.38-7.76)	0.477
At home	1	0.6	2	0.5	1.14 (0.10-12.62)	0.917

Appendix 2. Questionnaire

Research for Determination Risk Behaviors and Population number of People Who Inject Drugs (2022 year)

Questionnaire

Questionnaire Code _____

Interviewer's Code _____

Informed Consent 1. Obtained 2. Is not obtained

Start date of interview _____ day _____ month 2022 year

Start time of interview _____. End time of interview _____

Result of interview

1. Completed 2. Partially completed 3. Refusal 4. Other _____

General instruction to interviewer: Read each question to the respondent unless instructed "do not read to the respondent"

Q 1. City:

1. Tbilisi
2. Gori
3. Telavi
4. Zugdidi
5. Batumi
6. Kutaisi
7. Rustavi

Q 2. Respondent ID #: _____

Q 3. Place of the interview (Name of institution):

_____

Q 4. How many times have you participated in the similar survey?

_____ times		*Continue*
None	77	*Go to A1.*
No response	99	

Q 5. Did you find out the result of your HIV test?

Yes	1	*Go to A1.*
No	2	*Continue*
I haven't done the test	3	*Go to A1.*
No response	99	

Q 6. Why not?

1. Forgot
2. Was not interested in the results
3. I was afraid of the positive result
4. I could not manage to go back
5. From my point of view, the testing was not necessary at all (I was healthy – did not have any symptoms)
6. Other *(please indicate)* _____

88. Don't know
99. No response

Section A. Respondent's Demographic Data

A1. Where do you live presently?

1. City *(please indicate)* _____ 2. Village *(please indicate)* _____

99. No response

A2. How old are you?

_____ *Years old*

A3. Gender

1. Male 2. Female

A4. What is your nationality?

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

A5. Level of Education completed?

1. None
2. Primary (1- 4 classes)
3. Secondary (school, technical school, vocational school)
4. Incomplete Higher
5. Higher

99. No response

A6. Employment

1. Pupil/student 2. Have a permanent job 3. Have a temporary job
4. Retired/disabled 5. Unemployed 99. No response

A7. How much is your monthly income? (I mean from each source of income including the help from family members and others)

1. 100 GEL or less 2. 100-300 GEL
3. 300-500 GEL
4. 500-700 GEL 5. 700-1000 GEL 6. 1000 GEL and more
99. No response

A8.What is your marital status?

1. Married 2. Divorced/Living seperated from the spouse
3. Widow/widower 4. Has never been married
5. Other *(please indicate)* _____

A9. With whom do you live now? (Do not read out the options aloud; choose the option below relevant to the response)

1. With a spouse 2. With a partner 3. Single
4. With parents/relatives
5. Other *(please indicate)* _____ 99. No response

A10.a Have you ever been imprisoned (prison, prison camp)?

1. Yes _____ times 2. No 99. No response

(For interviewer: If the answer is either "No" or "No response" in the question A10.a go to the question A12)

A10.b How old were you when you were imprisoned for the first time?

_____ Years old 99. No response

A10.c When was the last time you were imprisoned?

1. 0-6 months ago 2. 7-12 months ago 3. More than 1 year ago
99. No response

A10.d How long have you been imprisoned last time?

1. For 0-3 months 2. For 3-6 months 3. For 7-12 months 4. For 1-2 years 5. For more than 2 years 99. No response

A10.e Have you ever used drug while being imprisoned?

1. Yes 99. No response

A11. Penalty for drug usage:

Put the answer in the appropriate column, in case of positive answer ask how many times and write down	Yes	How many times?	No	No response
1. Have you been detained in administrative sentence (fine) because of your drug use during the last 12 months?	1		77	99
2. Have you been imprisoned before trial because of your drug use during the last 12 months?	1		77	99
3. Have you been imprisoned because of your drug use during the last 12 months?	1		77	99

3.1 How long after you were last released from prison, did you inject drugs?	_____ Days _____ Months 88. Don't remember	99

A12. Within the last month how often have you consumed alcoholic beverages, such as beer, wine, vodka, other?

1. Every day 2. More than once a week 3. Once a week 4. Rarely
5. Never 6. Other ***(please indicate)*** _____ 99. No response

Section B. Drug Usage History

B1. How old were you when you started using drugs? I mean any kind of drugs used for only non-medical purposes, including those to be swallowed, smoked and/or injected

_____ Years old ***(please indicate an exact age)***

B2. How old were you when you injected the drug for the first time?

_____ Years old ***(please indicate an exact age)***

B3. How long ago did you realize that you are depended on injection drug? ***(Please indicate only a number of years, e.g. 2 years and 6 months should be indicated as 2.5 years)***

_____ Years ago 77. Don't think I'm depended on drug
99. No response ***(Go to question B4)***

(Interviewer: If in the question B3 respondent indicated "5 years or less" or "Don't think I'm depended on drug" ask the next question, unless go to B4)

B3.1. During the last 5 years have you received any of the following products and/or information free of charge?

(Several responses are acceptable)	Yes	No	Don't know	No response
1. Brochures/pamphlets/booklets on AIDS	1	2	88	99
2. Qualified information on AIDS	1	2	88	99
3. Condoms	1	2	88	99
4. Syringe/needle/butterfly needle/spoon/alcohol pad	1	2	88	99
5. Others ***(please indicate)*** _____	1	2	88	99

B4. Within the last 6 months, do you usually inject the drugs with the same PWIDs?

Yes	1	*Continue*
No, alone	2	*Go to B5*
No, with other PWIDs	3	
Don't know	88	
No response	99	

B4.1 How many PWIDs are members of your regular injecting group?

_____ *(please indicate an exact number)*

B5. If you recall, which drugs did you use within the last month and which ones did you inject?

(Do not read out the options aloud; choose the option below relevant to the response; several responses can be acceptable; ask again to clarify) Any other? Other?	Consumed Last Month		Injected Last Month	
	Yes	No	Yes	No
1. CNS depressants				
1.1 Barbiturates (_____)	1	2	1	2
1.2 Tranquilizers/Nonbarbiturate sedatives				
1.2.1 Zopiclone (Imovane, Somnol, Som-Neo, Drimolin, Sonorex, Nitress)	1	2	1	2
1.2.2 Zaleplon (Andante)	1	2	1	2
1.2.3 Diazepam (Valium, Relanium)	1	2	1	2
1.2.5 Reladorm	1	2	1	2
1.2.6 Clonazepam (Rivotril)	1	2	1	2
1.3 Inhalants	1	2	1	2
1.4 Antihistamines (_____)	1	2	1	2
1.5 Other depressants				
1.5.1 Baclofen (Baclosan)	1	2	1	2
1.5.2 Gabapentin (Tebantin, Gabagamma, Rotaleptin, Grimodin, "Gabagiri")	1	2	1	2
1.5.3 Pregabalin (Lyrica, Helimon)	1	2	1	2
2. Narcotic analgesics				
2.1 Codeine	1	2	1	2
2.2 Heroin/"Siretsi"	1	2	1	2

2.3 Opium	1	2	1	2
2.4 Poppy	1	2	1	2
2.5 Methadone	1	2	1	2
2.6 Buprenorphine (Subutex, Suboxone)	1	2	1	2
2.7 Morphine	1	2	1	2
2.8 Dezomorphine ('Crocodile")	1	2	1	2
2.9 Tramadol	1	2	1	2
2.10 Other Opiates (_____)	1	2	1	2
3. CNS stimulants				
3.1 Cocaine (Crack)	1	2	1	2
3.2 Amphetamine	1	2	1	2
3.3 Ecstasies/MDMA	1	2	1	2
3.4 Metamphetamine (Vint)	1	2	1	2
3.5 Methcathinone (Jeff)	1	2	1	2
3.6 Ephedra ("Tsitsvebi")	1	2	1	2
4. Hallucinogens				
4.1 Lysergic acid diethylamide (LSD)	1	2	1	2
4.2 Hemp (marijuana, hashish, anasha)	1	2	1	2
4.3 Cyclodol	1	2	1	2
4.4 Ketamine	1	2	1	2
5. Combination *(please indicate)* _____	1	2	1	2
6. Other *(please indicate)* _____	1	2	1	2
7. New psychoactive products	1	2	1	2
7.1 Bio (Spice)	1	2	1	2
7.2 Bio- LSD, NBOMe	1	2	1	2
7.3 Cristal, shower salt, mephedrone	1	2	1	2
7.4 Bio MDMA	1	2	1	2
7.5 Others	1	2	1	2
8. Other psychoactive products	1	2	1	2
8.1 Tropicamide	1	2	1	2
8.2 Magitus	1	2	1	2
Don't know/don't remember	88		88	
No response	99		99	

B5N1. If you recall, which opiates have you consumed/injected within the last year (12 months)?

2. Narcotic analgesics	Yes	No
2.1 Codeine	1	2
2.2 Heroin	1	2
2.3 Opium	1	2
2.4 Poppy	1	2
2.5 Methadone	1	2
2.6 Buprenorphine (Subutex, Suboxone)	1	2
2.7 Morhine	1	2
2.8 Dezomorphine ("Crocodile")	1	2
2.9 Tramadol	1	2
2.10 Other Opiates (_____)	1	2

(Interviewer: If either in the section 2 of the question B5 or in the question B5N1 respondent mentioned usage of some drugs continue, unless go to B6)

B5.1 During the last 12 months have you been consuming/injecting opiates with a continuous manner, every day?

Yes, for a month and over	1	*Continue*
Yes, more than one week and several times a year	2	
No	3	*Go to B6*
Don't remember	88	
No response	99	

B5.1.1 If yes, which one? _____

B5.2 Within the last 12 months did you have addiction withdrawal symtoms (cold turkey symotoms) when you tried to stop drug usage or decreased dosage abruptly?

1. I have never stopped injecting drugs 2. Yes 3. No 4. Don't know 99. No response

B5N2. Within the last 12 months have you ever needed to use more drugs (to increase the dosage) ***(indicate the drug from the question B5N1)*** **in order to get the same effect as you had when you started using drugs?**

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

B5N3. Within the last 12 months have you got agitated or nervous when you realized that you would have to miss the next dosage?

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

B5N4. Within the last 12 months in the mornings have you used this drug in order to avoid the addiction withdrawal symptoms (cold turkey symotoms) or have you got these symotoms?

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

B5N5. Within the last 12 months have you been worried about the fact that you use the opiates?

1. Yes 2. No 99. No response

B5N6. Within the last 12 months have it been difficult for you to cessate using this drug?

1. Yes 2. No 88. I have never stopped using 99. No response

B5N7. Within the last 12 months have you lost lots of time/energy getting this drug or recovering its effects?

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

B6. When was the last time you injected drugs?

____days ago ***(If the answer is "Today" please indicate 0)*** 88. Don't remember 99. Refused to answer ***(go to B8)***

B7. How many times did you inject drugs that day?

_____ times 88. Don't remember 99. Refused to answer

B8. Which drug did you last inject?

_____ 88. Don't remember 99. Refused to answer

B9. Within the last month how often did you inject drugs?

1. Once a month
2. Several times a month
3. Once a week
4. 2-3 times a week
5. Once a day
6. Several times a day

7. Have not injected *(Don't read out. Ask again and if more than a month has passed since the last injection, thank the respondent and end the interview)*

88. Don't know

99. No response

B10. Within the last 12 months have you used drugs in the temporarily occupied territories of the country?

1. Yes ____ times 2. No 99. No response

B11. Have you bought drugs while being in the temporarily occupied territories or the ones brought from there?

1. Yes 2. No 99. No response

B12. Have you been vaccinated for hepatitis B?

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

B13. If yes, where did you got vaccinated for hepatitis B?

1. In hospital 2. In prison 3. Abroad 88. Don't know 99. No response

B14. If not, do you desire?

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

Section C. Risking Behavior of Drug Use

C1. Have you ever used a needle/syringe/butterfly needle that was already used?

(Several answers are acceptable)

1. Yes, used by someone else 2. Yes, used by myself

3. No 88. Don't know 99. No response

(Inteviewer: If the answer is "No", "Don't know", or "No response" go to C7)

C2.1 Recall the last time you injected drugs, did you use needle/syringe/butterfly needle that was used by someone else?

1. Yes, I cleaned it 2. Yes, without cleaning 3. No

88. Don't know 99. No response

C2.2 Recall the last time you injected drugs, did you use needle/syringe/butterfly syringe that was used by yourself?

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

(Interviewer: If the answers in questions C2.1 and C2.2 are "No", go to C2.4)

C2.3 The last time you injected drugs did you use a needle/syringe/butterfly needle that was left at a place of gathering (e.g. Where the drugs were prepared, the apartment, or elsewhere) by either someone else or by yourself?

1. Yes, I cleaned i 2. No, without cleaning 3. No

88. Don't know 99. No response

C2.4 If there were many people the last time you injected drugs, what do you think, how many people used the shared needle/syringe/butterfly needle?

_____ *(please indicate the number)*

77. I was alone 88. Don't know 99. No response

C3. Recall the occasions within the last month when you injected drugs. How often did you do this using the same needle/syringe/butterfly needle that had been used by others?

1. Always 2. Almost always 3. Sometime 4. Once

5. Never 88. Don't know 99. No response

C4. Recall the occasions within the last month when you injected drugs. How often did you do this using the same needle/syringe/butterfly needle that had been used by yourself?

1. Always 2. Almost always 3. Sometimes 4. Once

5. Never 88. Don't know 99. No response

(Interviewer: If answers in questions C3 and C4 are "Never" – go to C7)

C5. If within the last month you have used the needle/syringe/butterfly needle that had earlier been used by either yourself or by others, how often did you clean it before use?

Always	1	*Continue*
Almost always	2	
Sometimes	3	
Once	4	
Never	5	*Go to C7*
Don't know	88	
No response	99	

C5.1 If you cleaned, how did you usually do it?

(several responses are acceptable)	Yes	No	Don't know	No response
1. With water (boiled, hot, cold)	1	2	88	99
2. With clorine	1	2	88	99

3. Boiled	1	2	88	99
4.Another method *(please indicate)* _____	1	2	88	99

(Interviewer: If the answer in question C3 is "Never", don't ask the question C6)

C6. During the last month, have you even once shared the needle/syringe/butterfly syringe with any of the following people?

(several answers are acceptable)	Yes	No	Don't know	No response
1. Your regular sexual partner	1	2	88	99
2. Sexual partner that you didn't know before (Casual)	1	2	88	99
3. Someone from the drug-addict group (drug-related friend)	1	2	88	99
4. Drug trafficker ("drug-dealer")	1	2	88	99
5. Stranger	1	2	88	99
6. Friend	1	2	88	99
7. Other *(please indicate)* _____	1	2	88	99

C7. During the last 30 days how many times did you get clean syringe from the sources written below and how many of them had the needle already put on?

1. Syringe exchange program ___ syringes, out of which needle was put on ___ syringes
2. Drugstore ___ syringes, out of which needle was put on ___ syringes
3. Friend ___ syringes, out of which needle was put on ___ syringes
4. Drug supplier___ syringes, out of which needle was put on ___ syringes
5. Another source ___ syringes, out of which needle was put on ___ syringes

C8. The last time you threw away the used needle/syringe/butterfly needle how did you do that? ***(Do not read out the options. Match the responses to the options below. If the respondent's answer is different from the options presented below, take note of the full answer)***

1. Threw the needle into the garbage bin without a cap
2. Bent/broke the needle and threw into the garbage bin
3. Threw the needle into the garbage bin with a cap
4. Put into a bottle/can/cooking device and left there

5. Threw on the ground
6. Burnt it in a oven
7. Other *(please indicate)* _____ 99. No response

C9. During the last month how often did you use new and sterile needle/syringe/butterfly needle? ***(Compare to the answers of C3.)***

1. Always 2. Almost always 3. Sometimes
4. Never 88. Don't know 99. No response

C10. Can you obtain new and sterile syringes and needles whenever you need them?

Yes	1	*Continue*
No	2	*Go to C12*
Don't know	88	
No response	99	

C11. Where do you buy/get new, sterile needles/syringes?

(several responses are acceptable)	Yes	No
1. Drugstore	1	2
2. Another shop	1	2
3. Hospital	1	2
4. Family/Relatives	1	2
5. Sexual partner	1	2
6. Friends	1	2
7. Another drug user	1	2
8. Drug trafficker (drug-dealer)	1	2
9. "Syringe and needle program"	1	2
10. Vending machine	1	2
11. Other *(please indicate)* _____	1	2

C12. During the last month how many times did you use a prefilled syringe? I mean the syringe that had been filled with drugs without your presence.

1. Always 2. Almost always 3. Sometimes 4. Once
5. Never 88. Don't know 99. No response

(Interviewer: Match the options of C12 question to the responses of C13 question)

C13. Please recall the last instance of taking drugs and tell me:

	Yes	No	Don't know	No response
1. Did you use a prefilled syringe? I mean the syringe that had already been filled with drugs without your presence.	1	2	88	99
2. Did you inject drug after it was filled with drugs from someone else's used syringe? (Despite the fact it was filled from front or behind)	1	2	88	99
3. Did you inject drug that was left in the syringe by someone else? (Injected it himself/herself and left the syringe with the left drug to you)	1	2	88	99
4. Did you use shared large syringe, bottle, spoon, cooking device/glass/flask, cotton/filter or water where the needle/syringe used by someone else might have been?	1	2	88	99
5. Did you use the drug solution from the container that had been prepared without your presence?	1	2	88	99

C14. Do you have experience of using drugs in another country/city/town over the last year?

C14.a Over the last year have you injected drugs in another country/city? *(If the respondent's answers in both questions are "No", go to C22)*				C14.b Which drug have you injected?			C14.c When you injected that drug, did you use the needle/syringe/buttefly needle that had been used by someone else?			
Yes	No	Don't know	No response	Please indicate	Don't know	No response	Yes	No	Don't know	No response
1	2	88	99							
1.1 Another city in Georgia *(please indicate)* _____					88	99	1	2	88	99
1.2					88	99	1	2	88	99
1.3					88	99	1	2	88	99
1.4					88	99	1	2	88	99
1.5					88	99	1	2	88	99
2.1 In other countries *(please indicate)*					88	99	1	2	88	99

2.2		88	99	1	2	88	99
2.3		88	99	1	2	88	99
2.4		88	99	1	2	88	99
2.5		88	99	1	2	88	99

C15. Have you experienced an overdose in Georgia during the last year?

Yes	1	*Continue*
No	2	*Go to C15.2*
Don't remember	88	
No response	99	

C15.1.What kind of help did you get? (Several responses are acceptable)

1. Emergency aid on site
2. Hospital treatment
3. Friends gave me naloxone
4. Other *(please indicate)* _____

C15.2. Have you witnessed someone experiencing an overdose in Georgia during the last year?

Yes	1	*Continue*
No	2	*Go to C16*
Don't remember	88	
No response	99	

C15.3. How did you help? (Several responses are acceptable)

1. Emergency aid on site
2. Hospital treatment
3. Friends gave him/her naloxone
4. Other *(please indicate)* _____

(Interviewer: If the answers in C15.1 and/or C15.3 are 1 or 2, go to C16)

C15.4. Did the medical staff inform police?

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

C16. Did you try to quit using drug without medical help during the last 12 months? ("Quitting cold turkey")

1. Yes 2. No 3. Had no "cold turkey symptoms" 88. Don't know 99. No response

C17. Have you ever got treatment or specific assistance because you use drugs?

Yes	1	*Continue*
No	2	*Go to C23*
Don't know	88	*Continue*
No response	99	

C18. During the last 12 months have you applied to a medical facility, specialized center to get a treatment or specific help because you use drugs?

Yes	1	*Continue*
No	2	*Go to C23*
Don't know	88	*Continue*
No response	99	

C19. During the last 12 months have you got treatment or specific help because you use drugs?

Currently undergoing medical treatment	1	*Continue*
I have been treated during the last 12 months, but I'm not undergoing treatment now	2	
No	3	*Go to C23*
No response	99	

C20. What kind of medical treatment or specific assistance have you taken over the last 12 months? ***(Do not read out the options. Clarify: "Is there any other treatment/help that you have taken?" Several responses are acceptable)***

	Yes	No
1. Consulting	1	2
2. Self-help groups	1	2
3. Detoxification with methadone/suboxone	1	2
4. Substitution with methadone/suboxone	1	2
5. Detoxification with other drugs	1	2
6. Detoxification without drugs	1	2
7. Psycho-social rehabilitation	1	2
8. At home	1	2
9. Other ***(please indicate)*** _____	1	2
Don't know	88	
No response	99	

C21. In which city/country did you take medical treatment? ***(Several answers are acceptable)***

1. Tbilisi 2. Batumi 3. Another city in Georgia
_____ 4.Abroad 99. No response

C22. Did you desire to get another treatment or specific help during the last 12 months, but couldn't get it? ***(Note "Yes" if he/she did not get such treatment/assistance)***

Yes (I'd desire, but didn't/couldn't get it), detoxification	1	***Continue***
Yes (I'd desire, but didn't/couldn't get it) substitution with methadone/suboxone	2	
No	3	***Go to D1***
Don't know	88	
No response	99	

C23. Why couldn't/didn't you get treatment or specific help during last 12 months? ***(Do not read out, more than one response is acceptable, match responses to given options)***

1. Had no desire
2. It is very expensive/ did not have enough money
3. Because of location
4. I applied, but there weren't enough places
5. I applied, but conditions (except the financial ones) were not satisfactory
6. Couldn't find good specialist/doctor
7. Other ***(please indicate)*** _____

88. Don't know
99. No response

Section D. History of sexual life

D1. How old were you when you had the first sexual contact?

_____ Years old ***(please indicate the exact age)***

77. Never had sexual contact ***(Go to Section F)***
88. Don't know 99. No response

D2. Have you had sex with a partner of opposite sex during the last 12 months?

Yes	1	***Continue***
No	2	***Go to D4***
No response	99	

D3. In total with how many partners of opposite sex have you had sex over the last 12 months?

_____ *(please indicate number)* 88. Don't know 99. No response

D3.1 How many of those were "regular sexual partners"? (E.g. spouse or live-in partner, or sexual partner you do not live with, but have regular sexual contact. Regular sexual contact means sexual relationship that lasts more than one year, or less than one year but with an intention to continue)

_____ *(please indicate number)* 88. Don't know 99. No response

D3.2 How many of those were paid female sexual partner? (I.e. those ones with whom you had a sexual contact in exchange for money or drugs)

_____ *(please indicate number)* 88. Don't know 99. No response

D3.3 Which was your last sexual partner?

1. Regular 2. Paid 3. Casual 88. Don't kno 99. No response

D3.4 Did you use condom during the last sexual contact?

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

D3.5 Were you or your sexual partner under the influence of drugs during the last sexual contact?

1. Yes, I was 2. Yes, my sexual partner was 3. Yes, both I and my sexual partner were 4. No 88. Don't know 99. No response

D4. We talked about your sexual partners of the opposite sex. Have you ever had a same-sex sexual partner?

Yes	1	*Continue*
No	2	*Go to E1*
No response	99	

D4.1 Have you had a same-sex sexual partner during the last 12 months (1 year)?

1. Yes 2. No 99. No response

D4.2 The last time you had sex with your same-sex partner, did you use a condom?

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

D.5 Have you had sexual contact in exchange for drugs?

1. Yes 2. No 99. No response

Section E. Number and Types of Partners

The following questions will be about your regular sexual partner. (E.g. spouse or live-in partner, or sexual partner you do not live with, but have regular sexual contact. Regular sexual contact means sexual relationship that lasts more than one year, or less than one year with an intention to continue)

E1. Have you had sex with your regular sexual partner over the last 12 months? *(Match the response to an answer in the question D3.1)*

Yes	1	*Continue*
No	2	*Go to E2*

E1.1 Recall your most frequent regular sexual partner. How many times did you have sexual contact with him/her over the last month?

_____ times 88. Don't know 99. No response

E1.2 Did you use a condom the last time you had sexual contact with your regular sexual partner?

Yes	1	*Continue*
No	2	*Go to E1.4*
Don't know	88	*Go to E1.5*
No response	99	

E1.3 Who initiated to use condoms at that time, you or your sexual partner?

1. I
2. Partner
3. Both
88. Don't know
99. No response

(Go to E1.5)

E1.4 Why didn't you or your sexual partner use a condom at that time?

(Don't read out the options. Match the response up to the options below. Several responses are acceptable)	Yes	No	Don't know	No response
1. Was not available/Did not have it	1	2	88	99
2. It is too expensive	1	2	88	99
3. Partner refused	1	2	88	99
4. Don't like it	1	2	88	99
5. Partner uses other contraceptives	1	2	88	99
6. Don't think it was necessary	1	2	88	99
7. Didn't think of that	1	2	88	99
8. Other *(please indicate)* _____	1	2	88	99

E1.5 How often did you use condoms with your regular sexual partner within the last year?

1. Always 2. Almost always 3. Sometimes 4. Never 88. Don't know 99. No response

E1.6 Does your regular sexual partner inject drugs?

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

The following questions I will ask will be about your paid sexual partner. A paid sexual partner means the partner with whom you have sexual contact in exchange for money or drugs.

E2. Did you have paid sex over the last 12 months?

(Match to the answers of question D3.2)

Yes	1	*Continue*
No	2	*Go to E3*

E2.1.1 Please recall all your paid sexual partners from whom you got money or drugs in exchange for sex. How many of those did you have over the last month?

_____ ***(please indicate number)*** 88. Don't know 99. No response

E2.1.2 Please recall all the paid sexual partners to whom you paid money or drugs in exchange for sex over the last month. How many of those did you have in total?

_____ ***(please indicate number)*** 88. Don't know 99. No response

(Interviewer: If there are no numbers indicated as answers in the questions E2.1.1 and E2.1.2, go to E2.3)

E2.2 Please recall your last paid sexual partner. How many times did you have sex with him/her over the last month?

_____ times 88. Don't know 99. No response

E2.3 The last time you had sex with your paid sexual partner, did you use a condom?

Yes	1	*Continue*
No	2	*Go to E2.5*
Don't know	88	*Go to E2.6*
No response	99	

E2.4 Who initiated to use condoms at that time, you or your sexual partner?

4. I
5. Partner
6. Both
88. Don't know
99. No response

(Go to E2.6)

E2.5 Why didn't you or your sexual partner use a condom at that time? ***(Don't read out the options.)***

Several responses are acceptable	Yes	No	Don't know	No response
1. Was not available/Did not have it	1	2	88	99
2. It was too expensive	1	2	88	99
3. Partner refused	1	2	88	99
4. Don't like it	1	2	88	99
5. Partner uses other contraceptives	1	2	88	99
6. Don't think it was necessary	1	2	88	99
7. Didn't think of that	1	2	88	99
8. Other *(please indicate)* _____	1	2	88	99

E2.6 How often did you use condoms with your paid sexual partner within the last year?

1. Always 2. Almost always 3. Sometimes 4. Never 88. Don't know 99. No response

E2.7 Do your paid sexual partners use drugs?

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

The following questions I will ask will be about your casual sexual partners. A casual sexual partner is sexual partner who neither is the regular one nor has ever been paid in exchange for sex.

E3. Did you have a sexual contact with a casual sexual partner over the last 12 months?
(Match to the answer of question D3.3)

Yes	1	*Continue*
No	2	*Go to E4*

E3.1 Please recall your very last casual sexual partner. How many times did you have sexual contact with him/her within the last month?

_____ times 88. Don't know 99. No response

E3.2 The last time you had sexual contact with your casual sexual partner, did you use a condom?

Yes	1	*Continue*
No	2	*Go to E3.4*
Don't know	88	*Go to E3.5*
No response	99	

E3.3 Who initiated to use condoms at that time, you or your sexual partner?

1. I

2. Partner 3. Both 88. Don't know 99. No response	*(Go to E3.5)*

E3.4 Why didn't you or your sexual partner use a condom at that time? ***(Don't read out the options. Several responses are acceptable.)***

	Yes	No response	Don't know	No response
1. Was not available/Did not have it	1	2	88	99
2. It is too expensive	1	2	88	99
3. Partner refused	1	2	88	99
4. Don't like it	1	2	88	99
5. Partner uses other contraceptives	1	2	88	99
6. Don't like the quality of condom				
7. Don't think it was necessary	1	2	88	99
8. Didn't think of it	1	2	88	99
8. Other *(please indicate)* _____	1	2	88	99

E3.5 How often did you use condoms with your casual sexual partner within the last year?

1. Always 2. Almost always 3. Sometimes
4. Never 88. Don't know 99. No response

E3.6 What do you know, do your casual sexual partners inject drugs?

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

E4. Have you had anal sex with any sexual partner within the last 12 months? ***(Explain: anal sexual contact means that the genitals of one person penetrates into the rectum of the partner.)***

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

E4.1 Did you use condom then?

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

E5. During the last month did you have any problems with obtaining condoms?

Yes	1	*Continue*
No	2	*Go to F1*
Don't know	88	
No response	99	

E5.1 If yes, what was reason?

_____ *(Please indicate)*

Section F. Knowledge and Attitude towards Hepatitis C

F1. Can you tell me how the hepatitis C virus is transmitted?

(Read the options out, circle each possible answer)	Yes	No	Don't know	No response
1. By food	1	2	88	99
2. By sexual contact	1	2	88	99
3. By shaking hands with infected person	1	2	88	99
4. Airborne (by coughing, sneezing)	1	2	88	99
5. By sharing hygiene products, like shaving equipment, manicure/pedicure instruments, toothbrush	1	2	88	99
6. By sharing everyday items, like utensils- glass, spoon, fork	1	2	88	99
7. By sharing used needle or syringe	1	2	88	99
8. By touching objects in public places (door handles, handles in transport, public toilets)	1	2	88	99
9. Other *(please indicate)* _____	1	2	88	99

F2. How can the risk of hepatitis C infection be reduced?

(Match the answers, several answers are acceptable)

1. By vaccination
2. By using condoms
3. By not sharing used needle and syringe with others
4. By not sharing injection set (large syringe, bottle, spoon, cooking device/glass/flask, cotton/filter, water)?
5. By not using nonsterile or used medical equipment
6. Other

88. Don't know/don't remember

99. No response

F3. Do you know/have you heard about hepatitis C elimination program?

Yes	1	*Continue*
No	2	*Go to F6*
No response	99	

F4. Where did you get information/hear about hepatitis C elimination program? ***(Several answers are acceptable)***

1. At medical facility
2. At methadone substitution therapy center/department
3. At harm reduction service center
4. From television
5. From internet
6. From friends/relatives
7. Other _____

88. Don't know don't remember 99. No response

F5. Can hepatitis C be treated in Georgia?

1. Yes, for free 2. Yes, requiring payment 3. No 99. No response

F6. Do you know where can you apply to take hepatitis C test?

1. Yes 2. No 88. Don't know/don't remember 99. No response

F7. Have you ever taken hepatitis C test? ***(Mark the test you have taken very last)***

Yes, during the last 2 years	1	*Go to F9*
Between the last 2-5 years period	2	
Yes, 5 years ago	3	
No	4	*Continue*
Don't know	88	*Go to F9*
No response	99	

F8. If you have never taken the test, why? ***(Don't read out, several answers are acceptable)***

1. I am afraid of the positive result
2. I don't think it's necessary
3. I don't know where to test
4. I don't want to treat and that's why I don't want to know the result
5. I am afraid that the test results will be made public
6. They will find out that I am a drug user
7. I did not have money
8. I did not think about it
9. Other _____

88. Don't know/don't remember

99. No response

(Interviewer: If the respondent answered the question F8, go to F19))

F9. Have you ever taken medications for hepatitis C treatment?

Yes, during the last 2 years	1	*Go to F11*
Between the last 2-5 years period	2	
Yes, 5 years ago	3	
No	4	*Continue*
Don't know	88	*Go to F11*
No response	99	

F10. Why did not you treat for hepatitis C? ***(Do not read out, several answers are acceptable)***

1. I am not infected and don't need to treat
2. The treatment was not available
3. doctor told me that treatment was not necessary
4. It was very expensive
5. I heard that the treatment had many side effects
6. I did not want to inject needles
7. I had to go very far away to take the medicine and meet the doctor
8. I am in the waiting list
9. Other _____

88. Don't know
99. No response

F11. Did you finish the treatment for hepatitis C or did you cease it before ending?

Finished the treatment	1	*Go to F13*
Ceased it before ending	2	*Continue*
Currently treat	3	*Go to F16*
Don't know	88	
No response	99	

F12. What was the reason when you cessecation treatment before ending?

1. Side effects of treatment
2. Treatment provider was far from me geographically
3. Negative attitude of the medical facility/the doctor/stigma/discrimination
4. Other _____

88. Don't know

99. No response

F13. Did you have a follow-up examination to find out if you recovered or not 12-24 weeks after the end of treatment?

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

F14. Did you recover as a result of treatment for hepatitis C? (The analysis confirmed that the hepatitis C virus is no longer in the blood)

Yes	1	*Go to F17*
No	2	*Go to F16*
Don't know	88	*Continue*
No response	99	

F15. Why did not you have a final examination to find out the result of treatment after its ending?

1. Examinations were expensive
2. I didn't know/the doctor has not told me to take
3. I didn't think it was necessary
4. Other _____

88. Don't know

99. No response

(If the respondent answered the question F15, go to F17)

F16. Have you had a repeat treatment?

1. Yes 2. No 99. No response

F17. Did you inject the drugs during the treatment period?

1. Yes 2. No 99. No response

F18. Did you resume/continue to inject drugs after ending/ceasing the treatment?

1. Yes 2. No 99. No response

F19. Where do you prefer to receive services (testing, confirmation, treatment)? ***(Read it out)***

1. At the hepatitis C treatment medical facility in my city
2. At the methadone substitution therapy center/department in my city
3. At the harm reducement service center (syringe and needle program) in my city
4. At another service provider in my city
5. Other _____

Section H. Knowledge and Attitude towards HIV/AIDS and Self-evaluation of Risks

H1. Have you heard about HIV infection?

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

H2. Have you heard about AIDS disease?

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

(Interviewer: Please explain that HIV is a human immunodeficiency virus, which causes AIDS. If answers in question H1 and H2 are "No" go to I4)

H3. Do you know anyone around you who has been infected with HIV, has AIDS or died of AIDS?

Yes	1	*Continue*
No	2	*Go to H5*
Don't know	88	
No response	99	

H4. Do you have a close relative or a friend who has been infected with HIV, has AIDS or has died of AIDS?

1. Yes, a close relative 2. Yes, a close friend 3. No

4. Other *(please indicate)* _____ 88. Don't know 99. No response

H5. What do you think how high is your risk of infecting with HIV? ***(Estimate the risk)***

1. High risk 2. Medium risk 3. Low risk

4. There is no risk 88. Don't know 99. No response

H6. Please give me your opinion regarding the following: ***(mark the relevant answer for each assertion)***

Assertions	Yes	No	Don't know	No response
1. Can the risk of transmitting HIV infection (that causes AIDS) be reduced by having one uninfected and devoted sexual partner?	1	2	88	99
2. Can the risk of transmitting HIV infection be reduced by using condoms during each sexual contact?	1	2	88	99
3. Can healthy looking person be infected with HIV (that causes AIDS)?	1	2	88	99
4. Can HIV infection be transmitted as a result of a mosquito's bite?	1	2	88	99

5. Can one get infected by sharing food with a person infected with HIV?	1	2	88	99
6. Can one get infected with HIV by using a needle already used by someone else?	1	2	88	99
7. Can one get infected with HIV by using shared injection set (utensil, spoon, cotton/filter) or water previously touched by a needle/syringe used by someone else?	1	2	88	99
8. Can one get infected with HIV by using the drug solution prepared without his/her presence from the container?	1	2	88	99
9. Can drug user protect oneself from getting infected by switching to noninjection drugs?	1	2	88	99
10. Can HIV infection be transferred from HIV-infected mother to her fetus or child?	1	2	88	99

H7. What do you think, is it possible to take a free and confidential test in your neighborhood (town/city) to reveal HIV-infection? "Confidential" means that nobody will know about the test results without one's permission

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

H8. If you wish to take an HIV test, do you know where to apply?

1.	Yes	*(Continue)*
2.	No	*Go to H9*
99.	No response	

H8.1. If you wish to take a free HIV test, do you know where to apply?

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

H9. I don't want to know the results, but have you ever taken an HIV test?

Yes	1	*Continue*
Yes, I have done it myself		
No	2	*Go to H10.1*
No response	99	*Go to H13*

H10. When did you take the very last HIV test?

Within the last year	1	*Go to H11*
Between the past 1-2 years period	2	*Continue*

2 years ago	3	
Don't know	88	
No response	99	*Go to H13*

H10.1. Please name the reason why didn't you take an HIV test during last 12 months? ***(Do not read out, several answers are acceptable)***

1. I am afraid of the positive result
2. I don't think it's necessary
3. I don't know where to test
4. I am afraid that the test results will be made public
5. They will find out that I am a drug user
6. I am afraid that the police will find out
7. I did not have money
8. I did not think about it
9. Other _____

99. No response

(Interviewer: If an answer in the question H9 is "No" go to H13)

H11. Please tell me, was it your initiative to take the test or it was needed for the document/certificate?

	Yes	No	No response
1. My initiative	1	2	99
2. Certificate	1	2	99
3. Other _____	1	2	99

H12. Don't tell me the test result, but did you find it out?

1. Yes 2. No 99. No response

H13. If by chance you were infected with HIV would you inform your spouse/regular sexual partner?

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

H14. If by chance you were infected with HIV would you inform your IDU partners?

Yes	1	*Go to H14.2*
No	2	*Continue*
Don't know	88	*Go to H14.2*
No response	99	

H14.1. Could you tell me, why would not you inform your IDU partners that you were infected? You might have several reasons. If that's the case, please name all of them.

H14.2. Would you take an HIV test if it is free and is held in a state/government facility?

Yes	1	*Go to Section I*
No	2	*Continue*
Don't know	88	*Go to Section I*
No response	99	

H14.3. If "No", why?

1. I am afraid of the positive test result
2. I don't think it's necessary
3. I am afraid that the test results will be made public
4. They will find out that I am a drug user
5. I am afraid that the police will find out
6. Other _____

99. No response

Section I. Use of prevention programs

(Ask the question I1 to the respondents who answered the questions H1 and/or H2 positively)

I1. From which of the below listed sources did you get information about HIV/AIDS?

(Several answers are acceptable)	Yes	No
1. Radio	1	2
2. TV	1	2
3. Journals/Newspapers	1	2
4. Booklets/Other printed information materials	1	2
5. Healthcare workers	1	2
6. School/Teachers	1	2
7. Friends/Acquaintance/Relatives/Colleagues	1	2
9. Non-governmental organizations (NGO) representatives/Social Workers	1	2
10. Billboards/Street Advertising	1	2
12. Internet	1	2
13. Other *(please indicate)* _____	1	2

(Interviewer: Check the responses of B3.1 question, if at least one of them is "Yes", go to I2)

I2.a Have you ever received any of the below listed products and/or information for free in Georgia?

(Several answers are acceptable)	Yes	No	Don't know	No response
1. Brochures/pamphlets/booklets on AIDS	1	2	88	99
2. Educational information on AIDS	1	2	88	99
3. Condoms	1	2	88	99
4. Syringe/needle/butterfly needle	1	2	88	99
5. Naloxone	1	2	88	99
6. Other *(please indicate)* _____	1	2	88	99

I2. Have you received any of the below listed products and/or information for free in Georgia during the last year?

(Several answers are acceptable)	Yes	No	Don't know	No response
1. Brochures/pamphlets/booklets on AIDS	1	2	88	99
2. Educational information on AIDS	1	2	88	99
3. Condoms	1	2	88	99
4. Syringe/needle/butterfly needle	1	2	88	99
5. Other *(please indicate)* _____	1	2	88	99

I3. Do you know where to apply for the "syringe and needle program" if necessary?

Yes	1
No	2
No response	99

Section J. Social Impact

J1. Please tell me where do you normally inject drugs? ***(Don't read out, match the responses, several answers are acceptable)***

1. Street
2. Apartment
3. Automobile
4. Entrance hall
5. Non-residential space (garage, basement, attic, elevator, construction, abandoned house, ruins)
6. Open space (forest, riverbank, seashore)
7. The same place where I buy drugs

8. Wherever it is possible
9. Other ***(please indicate)*** _____

J2. Please name the people who have the biggest impact on you to continue using drugs either intentionally or not. Maybe you can name only two of them. ***(Ask again if necessary)*** **Who are they for you?** ***(One answer per column)***

	Person 1	Person 2
Parents	1	1
Siblings/Relative	2	2
Spouse/sexual partner	3	3
Children	4	4
Friend	5	5
Needle partners	6	6
Never	99	

J3. **Please name the people who have the biggest impact on you to cease using drugs either intentionally or not. Maybe you can name only two of them.** ***(Ask again if necessary)*** **Who are they for you?** ***(One answer per column)***

	Person 1	Person 2
Parents	1	1
Siblings/Relative	2	2
Spouse/sexual partner	3	3
Children	4	4
Friend	5	5
Needle partners	6	6
Never	99	

Network Size Determination

(Form must be completed by the interviewer)

Coupon Number: _____

#	Question	Response
1	How many PWIDs **living in your city** (name the research city) do you know?	
2	How many of them do you know **personally** (those, whose names you know, know who they are and at the same time, they know you too)?	
3	How many of them are **18 years or over**?	
4	How many of them have injected drugs during **the last month**?	
5	How many of them have you seen during **the last month**?	

Number of People You Know by Specific Name

Now I want you to recall all the people you know by specific name and write their number down. Please also take into consideration that

- You should know such person by face and name, and he/she should also know you by face and name;

And

- **Alternative 1** You should have had contact with such person during the last 2 years personally, by phone or by the Internet (e.g. via e-mail, Skype, correspondence on social networks);

  Or

- **Alternative 2** You should have shared food or drink with such person anywhere during the last 2 years (e.g. at work, restaurant, home), this person might be a family member, coworker, neighbor, etc.;

And

- Such person should be of any age and should live in Georgia

For example: Imagine that I am asking you to recall the number of people whose name is "Manana". Let's recall the total number of people whose name is "Manana". Let's say you recalled and counted 11 such people. Excellent! Let's now exclude the number of people whom you know, although they do not know you (let's say there is 1 such person). Then exclude all the people named “Manana” who do not live in Georgia (in this case, let's assume that all the people named “Manana” you know live in Georgia). Also, exclude all the people named “Manana” whom you have interacted with neither personaly, nor by phone/the internet during

the last 2 years (let's say there are 3 such people). Therefore, the number of your acquaintances named "Manana" is 11-1-3 = 7 people. We know that this is not an easy task. Please try your best and recall. Finally, if you could not recall a single person with such particular name, please enter - 0.

Description	Answers	How many of them know that you inject drugs?
1 How many "**Mamukas**" do you know?	_____ people	_____people
2 How many "**Lukas**" do you know?	_____ people	_____people
3 How many "**Zurabs**", "**Zuras**", "**Zukas**" and "**Zurikos**" do you know?	_____ people	_____people
4 How many "**Vazhas**" do you know?	_____ people	_____people
5 How many "**Sophikos**", "**Sophios**" and "**Sophos**" do you know?	_____ people	_____people
6 How many "**Mananas**" do you know?	_____ people	_____people
7 How many "**Shorenas**" do you know?	_____ people	_____people
8 How many "**Ninos**", "**Ninikos**" and "**Ninas**" do you know?	_____ people	_____people
9 How many "**Maias**" do you know?	_____ people	_____people
10 How many "**Davits**", "**Datos**", "**Datunas**" and "**Datikos**" do you know?	_____ people	_____people

Number of Acquaintances by Groups

Now I will ask you about other people you know. I will repeat once more and remind you that

- You should know such person by face and name, and he/she should also know you by face and name;

And

- **Alternative 1** You should have had contact with such person during the last 2 years personally, by phone or by the Internet (e.g. via e-mail, Skype, correspondence on social networks);

Or

- **Alternative 2** You should have shared food or drink with such person anywhere during the last 2 years (e.g. at work, restaurant, home), this person might be a family member, coworker, neighbor, etc.;

And

- Such person should be of any age and should live in Georgia

Question	Total	How many of them know that you are PWID?	Only men	How many of them know that you are PWID?
1 How many people do you know who **got married** in 2021?	_____ people	_____ people	_____ men	_____ men
2 How many **school teachers** do you know?	_____ people	_____people	_____ men	_____ men
3 How many people did you know who **died** in 2021?	_____ people	_____ people	_____ men	_____ men
4 How many people did you know who **died of cancer** in 2021?	_____ people	_____ people	_____ men	_____men
5 How many people do you know who **were injured or died in a road accident** in 2021?	_____ people	_____ people	_____ men	_____ men
6 How many **higher education students** do you know?	_____ people	_____people	_____men	_____ men

Thank the respondent for the collaboration and say goodbye.

Questionnaire for the nomination method

1. During the last year how many of your close friends (including the women) did you use (inject) drugs with or how many, you are sure, consumes/has consumed (injects/injected) drugs (Including those who died because of a drug overdose or any other cause)?
   Total ___ Women among them ___
2. Are you sure? Please think about it once more. It seems to me that (it is too much/it is too little/you answered me quickly/you rounded the number up). Please list their names (even if they are incorrect, invented) and count them together, if there are any women, definitely name them. Please tell us which one is the woman? To the interviewer: circle the code indicating a woman.
   Names:

I	VI
II	VII
III	VIII
IV	IX
V	X

Questions: During the last year	I	II	III	IV	V	VI	VII	VIII	IX	X
3. Has he/she been detained by police because of the drug use?										
4. Has he/she been tested for HIV/AIDS?										
5. Has he/she received treatment for addiction withdrawal symptoms (cold turkey symptoms) in hospital? **(If yes, go to 8)**										
6. Was he/she going to receive treatment for addiction withdrawal symptoms (cold turkey symptoms) in hospital? **(If no, go to 8)**										
7. Why did not he/she receive?										
8. Did he/she participate in methadone substitution program?										
9. Did he/she participate in free prevention programs, like:										
9.a Syringes and needles program" (where sterile injection materials are given)										
9.b Voluntary consultation with doctors and psychologists and testing for hepatitis B and C, HIV/AIDS, syphilis?										
10. Did he/she die as a result of drug overdose?										

To interviewer: indicate the appropriate codes (1-"Yes"; 2-"No"; 88-"Don't know"; 99-"No response")

During the interview, the respondent was:

1. Interested 2. Indifferent 3. Irritated 4. Calm 5. Agitated 6. Under the influence of drugs

End time of interview / _/

The quality control of the interview was carried out