

PERCEPTIONS AND ATTITUDES OF PLHIV, KEY POPULATIONS AND HEALTH PROFESSIONALS ON THE FACTORS INFLUENCING HIV TESTING BEHAVIOUR

BEHAVIOURAL SCIENCE BASED FINDINGS (BEHAVIOURAL INSIGHTS)



QUALITATIVE STUDY REPORT
2020 Tbilisi, Georgia



The study was conducted within the frame of joint UNFPA/UNDP innovative initiative exploring key hindering factors for low uptake of HIV testing through Behavioural Insights (BI) prism and funded by the UNAIDS.

The study was developed with technical and financial support of UNFPA Georgia Country Office in close collaboration with the National Center for Disease Control and Public Health (NCDC&PH).

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Perceptions and Attitudes of PLHIV, Key Populations and Health Professionals on the Factors Influencing HIV Testing Behaviour

**Behavioural Science Based Findings
(Behavioural Insights)**

Qualitative Study Report

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ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
EECA	Eastern Europe and Central Asia
FGD	Focus Group Discussion
FSW	Female Sex Worker
HIV	Human Immunodeficiency Virus
IBBS	Integrated Biological and Behavioural Surveillance
IDI	In-depth Interview
KAP	Knowledge, Attitudes and Practices survey
KPs	Key Populations
MICS	Multiple Indicator Cluster Survey
MSM	Men having Sex with Men
NGO	Non-Governmental Organization
PHC	Primary Healthcare
PLHIV	People Living with HIV/AIDS
PrEP	Pre-Exposure Prophylaxis
PWID	People who Inject Drugs
VCT	Voluntary Counseling and Testing
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund

EXECUTIVE SUMMARY

Present qualitative study, titled *Perceptions and attitudes of PLHIV, Key Populations and health professionals on the factors influencing HIV testing behaviour* was conducted within the framework of project "Support to Healthy Lifestyle and SRH Education", under 2020 agreement between Center for Information and Counseling on Reproductive Health - Tanadgoma with the financial support from UNFPA.

Goal of the study: Goal of the study is to understand HIV testing challenges from behavioural lens, and explore barriers and motivating factors related to HIV testing behaviour.

Specific study objectives are:

- Explore **perspectives of KP groups** about HIV testing and factors influencing decision making and behaviour around being tested for HIV
- Explore **perspectives of healthcare workers** about key population groups and HIV testing
- Identify modalities for HIV testing services that will be preferred by KPs and well-accepted by service providers.

Study rationale: Over the past decade Georgia has made significant progress in strengthening the treatment and care services for people living with HIV. However, beyond this achievement, low detection rates of HIV-infected people remain the challenge: more than one-third of the estimated HIV-positive persons (35%; 3,150 infected) still remain unaware of their HIV-positive status.

Therefore, improving detection of HIV-infected people is recognized as one of the strategic priorities for the country. To overcome the most critical challenge to the national response to HIV, it was decided to conduct the qualitative study learning perceptions and insights of HIV-positive people, key populations, and healthcare workers on HIV testing barriers and contributing factors.

The findings from the study will help stakeholders improve testing and, respectively, HIV detection rates, which is crucial to the country to meet its National Strategic Plan objectives and reach UNAIDS ambitious target of '95-95-95' by 2030. Strengthening national response to HIV/AIDS is in line with Sustainable Development Goals (SDGs) Task 3.3, which engages specifically the government's commitment to ending the AIDS epidemic by 2030.

Study methods: Focus group discussions and in-depth interviews were conducted among the study populations to gather realistic, context-relevant knowledge regarding the behaviours, opinions, and perceptions of specific groups of people in relation to HIV infection in general and HIV testing in particular.

Qualitative research was carried out in 3 cities of Georgia: Tbilisi, Batumi and Zugdidi. The study targeted 5 groups: healthcare workers; People living with HIV/AIDS (PLHA); Men who have sex with men (MSM); People who Inject Drugs (PWIDs); and female sex workers (FSWs).

The study fieldwork was carried out in August 2020. A total of 75 people were interviewed, 23 out of them were members of the HIV-affected group, and 13 were medical personnel.

Bioethical issues: The study protocol was reviewed and certified by Health Research Union Committee for Bio-medical ethics (IRB00009520, IORG0005619) (Certificate # 2020-8, 08/06/2020).

Research tool - The interview and focus group guides developed through participatory process involving the study team leader, national experts, as well as partners from the UNFPA and the UNDP Behavioural Insights team.

The main findings of the study:

Perceived susceptibility: Most members of the key populations objectively assess the risk of HIV infection, although certain part of these populations have not been tested for HIV in the last 12 months. Thus, it is assumed that correct perception of the risk of infection is necessary, though insufficient condition for testing, as many other factors affect the decision.

Perceived severity of the disease: Disease severity and the fear of diagnosis for the majority of the study groups are rather related to psychological and social contexts, than to the health issues. Fear of diagnosis is mostly related to expected stigma and discrimination, threat of outcasting from family, friends or the society; Moreover, fears of being fired and limitations of employment opportunities were also revealed.

Benefits of timely testing: Majority of the respondents are well informed about the expected benefits of timely HIV testing, although they think awareness in larger part of the population is not adequate. Acknowledging effectiveness of timely treatment, in their opinion, may become strong motivating factor for testing.

Barriers to testing: Numerous barriers have been identified during the study: Insufficient awareness regarding HIV and related available services, stigma and discrimination; Distrust; Unfriendly environment; Fear of confidentiality breach; The indifferent and, sometimes, judgmental attitudes of medical personnel towards at-risk populations and infected individuals. Limited geographical availability of testing was mentioned as well. All these barriers outweigh the positive factors that increase motivation to conduct timely testing and learn one's own status.

Regional Inequality: The research has highlighted regional inequality. Respondents point out testing services being limited to people living in rural areas and small towns. In addition, fear of confidentiality breach is more acute in the regions.

Knowledge and attitudes of the medical personnel: Approaches and attitudes towards HIV testing vary from institution to institution. Part of the medical personnel speaks openly that the medical personnel in healthcare sector is not ready to provide benevolent and friendly services to people with different and marginalized behaviour.

Standardization of the procedure for reporting HIV test results: Study has shown that even in experienced, specialized institutions, privacy and confidentiality may be violated when reporting HIV test results. It was found that medical personnel were not aware of the rules for PLHA partner notification. The root of this challenge lies within the legislative gap, since there are no by-laws on notification of the HIV-positive status.

Infrastructure inadequate for testing: Infrastructure of many medical facilities (especially in the regions) is rather incompatible with provision of quality and friendly services. The most frequently mentioned disadvantage is non-private environment. Furthermore necessity to adhere to sanitary and hygienic norms was emphasized.

Attitudes and lack of motivation among the primary healthcare (PHC) personnel: Attitudes of PHC personnel towards HIV screening is somewhat heterogenous. Part of the personnel perceives the screening program as the plan and focuses on the quantity of services. Inclusion of PHC into the screening program increased the workload of the personnel, although their remuneration stayed the same. All this may lead to demotivation of personnel, which jeopardizes quality of service.

Denying problems in healthcare and dysfunctional mechanisms for feedback from the patients: Medical personnel denies existence of testing barriers in the healthcare system. Nearly all participating healthcare workers noted that all medical institutions have mechanisms in place to seek patients' feedback, although it is likely these mechanisms are either not functioning or not effective. Such denial is remarkable and it is not likely that healthcare system takes any measures to solve this problem until appropriate evidence is collected and the system acknowledges the problem.

Civil society (community) based HIV testing model: The research has showed that non-governmental organizations and perceived as the most comfortable and friendly service providers for testing. Social accompanying to testing, peer involvement, and sharing successful experiences by PLHA were listed as desirable components of the model.

HIV self-testing: potential and expected challenges: Participants unequivocally state that self-testing has potential to increase number of people who get tested and, consequently, improve identification of HIV cases. However, different opinions were expressed regarding the expected challenges.

Recommendations based on study findings:

Recommendation 1: Training of the medical personnel: It is important to train/retrain personnel of the primary healthcare centers and other clinics on the following topics: counseling skills, specifics of working with high risk behaviour groups, stigma/discrimination, data confidentiality, patients' rights, Georgian law on HIV/AIDS, etc.

Recommendation 2: Defining and institutionalizing regulations/rules based on national HIV/AIDS law: It is important that HIV testing, reporting test results, and partner notification procedures are developed by qualified experts and approved for further institutionalization.

Recommendation 3: Improving testing infrastructure; ensuring privacy and comfort: It is important to improve infrastructure at medical institutions and ensure private and comfortable environment for counselor and patient.

Recommendation 4: Expansion and sustainability of community-based HIV testing model: Active involvement of NGOs in HIV prevention services and sustainability of their functioning are considered as important conditions for maintaining high quality testing services. Community model should include: social accompanying, involvement of peers and PLHIV.

Recommendation 5: Expanding self-testing, as an alternative way of testing coverage: It is recommended to offer alternative ways of HIV self-tests provision to high risk groups. In this regard, it is necessary to elaborate operational manual of self-testing service provision, which will serve as a roadmap for the patient.

Recommendation 6: Conducting patients' satisfaction survey and institutionalization of effective feedback mechanisms: It is important to create/improve quality control mechanisms and contribute to their enacting in the healthcare system. Particular attention shall be paid to receiving real feedback from the patients; analysis of the issues identified by the patients and adequate and timely reaction to the feedback.

Recommendation 7: Developing and planning HIV testing barriers' reduction strategy for rural population: It is desirable to study the situation in the regions and develop the strategy tailored to their needs and specifics.

Recommendation 8: Conducting informational campaigns: It is desirable to carry out information campaigns to reduce HIV-related attitudes and stigma in the general population. Free testing should be available during rallies and promotional events.

Recommendation 9: Focusing provider-initiated testing in the primary healthcare on targeted testing: It is important to target HIV testing initiated at the primary healthcare level on particular groups, hence contributing to effectiveness and efficiency of the services provided.

Recommendation 10: Studying scale of stigma and discrimination in the healthcare system: It is desirable to conduct the stigma index study, the findings of which will become the basis for planning and implementation of targeted interventions.

BRIEF PROGRAM OVERVIEW

The study of behavioural insights “Perceptions and attitudes of PLHIV, KPs and health professionals on the factors influencing HIV testing behaviour” was carried out within the frame of joint UNFPA/UNDP innovative initiative exploring key hindering factors for low uptake of HIV testing through Behavioural Insights (BI) prism.

One of directions of the existing agreement is "evidence-based HIV services for key populations". In this regard, the United Nations Development Program (UNDP) and the United Nations Population Fund (UNFPA) have launched joint initiative to address two specific objectives:

1. Promoting stigma-free medical services for HIV-infected individuals and key populations within the health sector
2. Develop design for the randomized controlled trial to promote HIV testing among young people and key populations by identifying and minimizing barriers to testing services.

In the frame of the initiative, UN agencies and NGO Tanadgoma collaborate closely with the National Center for Disease Control and Public Health (NCDC), the AIDS Center, academic institutions, and civil society and community organizations.

GEORGIAN CONTEXT: OVERVIEW OF THE HIV/AIDS EPIDEMIC

Georgia is the country with low prevalence of HIV, where the prevalence rates of HIV is estimated as 0.4% among the adult population¹. From the very first case of HIV until October 1, 2020, overall 8,520 cases were registered, of which 75% were male. By modeling with SPECTRUM - the instrument provided by the UNAIDS program, total number of people living with HIV in Georgia by the end of 2020 is estimated to reach 9100 cases.

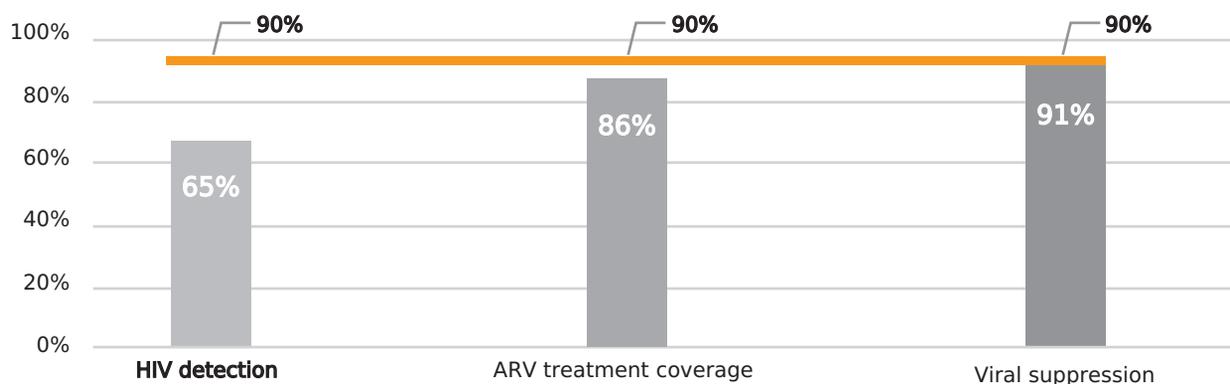
HIV is concentrated among the key populations (KPs) - men who have sex with men (MSM) and people who inject drugs (PWIDs). Over the last ten years, the prevalence of HIV among MSM has increased dramatically and reached 20.7% in 2017. Nevertheless, heterosexual transmission of HIV has taken the lead. Almost half (48.5%) of the cases registered in 2019 are related to this route of transmission².

Georgia, like other countries in Eastern Europe and Central Asia (EECA), has made significant progress over the past decade in strengthening HIV treatment and care services, which are directly linked to improving viral suppression in patients and improving their health. However, in line with this significant achievement, low detection rates of PLHIV individuals pose remarkable challenge: more than one-third of estimated number of PLHIV (35%; 3,150 infected) still remain unaware of their HIV status.

1.UNAIDS Global AIDS Monitoring Report. 2018. Georgia
2.http://aidscenter.ge/epidsituation_geo.html, seen on 25.09.2020

Analysis of data from Eastern Europe and Central Asia shows that Georgia is leading in terms of treatment enrollment, and with regards to this indicator Georgia was close to achieving specific target for 2020 (actual 86% vs target 90%)³; and with regards to the rate of viral suppression among those under treatment, Georgia was able to achieve an ambitious goal in 2020 (actual 91% vs target 90%). However, in terms of HIV detection, Georgia lags behind many countries in the EECA region.

Figure 1: UNAIDS 90X90X90 target achievements in Georgia



Low referrals for HIV testing are also confirmed by studies among the key populations. In particular:

- **MSM:** In three largest cities of Georgia (Tbilisi, Batumi, Kutaisi) only a little over half of the MSM respondents mentioned they had been tested for HIV in the last 12 months⁴;
- **Female sex workers:** The rates of HIV testing among sex workers have been even lower in recent years⁵;
- **People who inject drugs:** Test rates among PWIDs vary considerably by cities, although average countrywide data show that despite an increased risk of infection, only one-third have been tested for HIV in the past year (33% (24.3-38%))⁶;
- **General population:** And even more concerning result was seen in the general population survey. According to multi-indicator cluster survey (so-called MICS6) conducted by joint initiative of UN agencies, only 1 in 20 men reported having been tested for HIV within 12 months prior to the interview. Among women, the figure is slightly higher, which may be explained by routine HIV screening program for pregnant women.

3.Unpublished presentation. Tengiz Tsertsvadze. AIDS Center. Presentation at the CCM meeting. July 31, 2020.

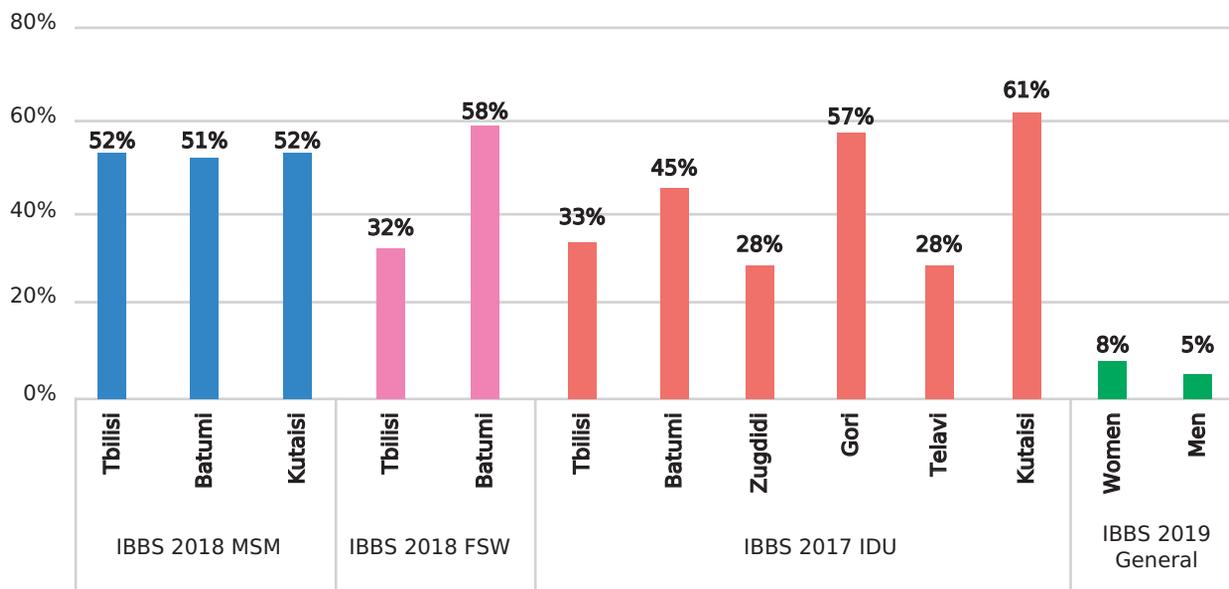
4.HIV risk and prevention behaviors among Men who have Sex with Men in Tbilisi, Batumi and Kutaisi, Georgia. Bio-Behavioral Surveillance Survey. 2019. Curatio International Foundation. Center for Information and Counseling on Reproductive Health - Tanadgoma. With GFATM financial support.

5.Integrated Bio-behavioral surveillance and population size estimation survey among Female Sex Workers in Tbilisi and Batumi, Georgia Study Report. 2017. Curatio International Foundation. Center for Information and Counseling on Reproductive Health - Tanadgoma. With GFATM financial support.

6.HIV risk and prevention behaviors among People Who Inject Drugs in seven cities of Georgia. 2017. Curatio International Foundation. Bemoni Public Union. With GFATM financial support.

- Youth: According to MICS6 study, the rates of HIV testing in the last year are not available, although the study shows only 0.8% of young people aged 15-17 indicating they have ever been tested for HIV.

Figure 2: Rates of HIV testing among various populations



STUDY RATIONALE

Low demand for HIV testing and low testing coverage remain the critical challenge to the national response to HIV/AIDS. Therefore, improving detection of people living with HIV is recognized as one of the strategic priorities for the country. The latter is possible only by improving availability of HIV testing services, its attractiveness and the quality of service.

National HIV/AIDS Strategy⁷, the Global Fund AIDS Program and other strategic documents confirm that HIV testing services for the key populations have been organized in specialized medical centers as well as non-governmental organizations for the last two decades. In order to improve detection, network of mobile laboratories has been actively expanded, currently offering HIV testing during fieldwork in various cities.

In the last few years, after initiation of the state program for elimination of hepatitis C in Georgia, the integrated screening component of HIV, tuberculosis and viral hepatitis has been gradually implemented in primary health care organizations. Under the Integrated Screening Program, the total of 62,000 tests were performed during the first 7 months of 2020 (January-July), and 36 cases of HIV infection were detected (sero-positivity rate 6 per 10,000 surveyed)⁸.

7. Georgian National HIV/AIDS Strategy. 2019-2022 წლები. <http://www.georgia-ccm.ge>

8. Unpublished presentation. Tengiz Tsertsvadze. AIDS Center. Presentation at the CCM meeting. July 31, 2020.

In order to promote and expand HIV testing, self-testing for HIV has been introduced since 2020 in accordance with National Strategic Plan; However, data on the effectiveness of this intervention are still limited.

As mentioned above, expanding HIV testing, identifying infected persons and their timely involvement in treatment and care services is set as priority for the country, and to achieve this, it is critical to assess barriers to testing and identify factors that influence human behavior. When studying barriers to testing, it is especially important to assess the environment within medical facilities, since many medical facilities, including primary healthcare centers, got involved in HIV testing services in the recent years, and these facilities have become new players in delivering HIV testing.

To overcome the most critical challenge in the national response to HIV in Georgia, it was decided to carry out the qualitative survey to learn the views of people living with HIV, key populations, and healthcare workers on HIV testing barriers and contributing factors.

Effective strategies for behaviour change should be planned and implemented in populations at risk, including young people with vulnerable behaviours. Behaviour change implies both reduction in risky behaviour as well as an increased demand for HIV testing. Behavioural change interventions should be based on the findings of behavioural science, the so-called behavioural insights, studying of which was the main goal of the present research.

The qualitative research was carried out within the framework of joint innovative initiative of the United Nations Population Fund and the United Nations Development Program, implemented by the UNFPA local partner, non-governmental organization " Center for Information and Counseling on Reproductive Health - Tanadgoma", as well as the National Center for Disease Control and Public Health (NCDC), AIDS Center, UN Development Program (UNDP), representatives of scientific institutions and community organizations. The evidence and research findings from this collaboration will be used to develop behavioural science-based, stigma-free HIV testing services.

It should be noted that the study of barriers to HIV testing was never conducted in Georgia until 2020. The first such study was carried out by NGO Tanadgoma with financial support from UNFPA. Study⁹ of the causes of low demand and accessibility for HIV testing among young people revealed testing barriers in young people aged 18-24. The research aimed at the following objectives:

- Learning individual and structural barriers that determine the low demand and accessibility for HIV testing among young people;
- Learning local context related to HIV/AIDS and HIV testing from the perspective of youth behaviour change communication and develop recommendations for planning and implementing behavioural intervention strategies.

9. Demand for and uptake of HIV testing among youth in Georgia. Qualitative research report. Authors: Lela Kurdghelashvili; Tamar Sirbiladze; Nino Tsereteli; et al. Center for Information and Counseling on Reproductive Health - Tanadgoma. With UNFPA financial support. 2020. Georgia

Study involved 115 young people, including vulnerable and at-risk youth, and carried out over all 10 focus group discussions and 15 in-depth interviews. The research was conducted in 5 cities of Georgia - Tbilisi, Batumi, Zugdidi, Gori and Telavi.

Study of young people was based on the theory of social cognition (learning)¹⁰, which considered three-component model. The latter implies that human behaviour is the total result of interaction and interference of personal (characteristic) factors, environmental factors, and behaviour.

Study of young people identified the following major barriers to HIV testing:

- Expectations of negative public attitudes towards HIV-positive people and HIV-related stigma were named by respondents as the main barrier to seeking HIV testing.
- Lack of awareness among young people regarding HIV testing services. Not knowing locations of anonymous and free testing opportunities.
- Fear of anonymity and confidentiality breach.
- Unfriendly personnel and incompetent environment.
- Limited geographical accessibility of HIV testing services, especially in the regions. Long distances to the testing centers and the time or financial factors related to travel.

As described above, the goal of the testing barriers study among youth was not to assess perceptions and insights of vulnerable groups including those infected, as well as of the medical personnel, regarding barriers to HIV testing. Thus, present study is unique in this regard.

Perceptions and insights of different target populations on HIV barriers will inform HIV prevention policies and help stakeholders improve testing and, consequently, HIV detection rates. Expanding and improving HIV testing services by minimizing existing barriers will be crucial for the country to meet the objectives set in the National Strategic Plan and achieve UNAIDS' ambitious target of '95 -95-95' by 2030, fulfill therefor Sustainable Development Goals (SDGs) Task 3.3, which specifically underlines the government commitment to end the AIDS epidemic by 2030.

Thus, the goal of the study on stakeholder perceptions and insights regarding the testing barriers (hereinafter, the Barriers Study) is completely harmonized with the country's international commitments, the priorities announced by the government, and the country-specific needs.

10.Social Cognitive(Learning) Theory (SCT; Bandura 1986)

STUDY METHODOLOGY

The study goal and objectives

Study seeks to understand HIV testing challenges from behavioural lens, and explore barriers and motivating factors surrounding HIV testing behaviours.

The study set the following specific objectives:

- Explore **perspectives of KP groups** about HIV testing and factors influencing decision making and behaviours around being tested for HIV
- Explore **perspectives of health care workers** about key population groups and HIV testing
- Identify modalities for HIV testing services that will be preferred by KPs and well-accepted by service providers.

Methods

Qualitative research design is best suited for exploring, describing, and gaining in-depth insights into HIV testing phenomena. Focus group discussions (FGDs) and in-depth interviews (IDIs) will be conducted among study populations to produce contextual real-world knowledge about the behaviours, shared beliefs and perceptions of specific group of people about HIV infection in general, and about HIV testing in particular.

FGDs as well as IDIs were conducted among three heterogeneous study population groups: key populations (including LGBTI, PWIDs, SWs); people living with HIV; and healthcare workers. FGDs, and IDIs were audio-recorded after a consent from each respondent was secured. In addition, an interviewer was taking notes to capture informative visual observations – respondents' mimics, emotional intonations, facial expressions, alertness, etc. Field notes provided additional information and helped researchers understand respondents' perspectives better.

Study tool

Interview guide is developed through participatory process involving team leader, national experts and partners from UNFPA and the UNDP Behavioural Insights Team (BIT).

The topic guide is organized around two major domains:

Domain I: Exploring behavioural insights, barriers and motivating factors for HIV testing

Domain II: Exploring perspectives of various target audiences about preferred HIV testing models

Domain I. Exploring behavioural insights, barriers and motivating factors for HIV testing

To explore behavioural insights for HIV testing uptake the Health Belief Model (HBM)¹¹ was used. The model suggests that people’s awareness and beliefs about health problems, perceived risk, perceived benefits, perceived barriers and cues to action – can largely influence the engagement of an individual in health promoting behaviours. The HBM has been widely used in HIV prevention research.^{12;13}

Perceived susceptibility	How increased susceptibility to getting HIV may trigger health protective behaviour, such as HIV testing
Perceived severity	How perceived severity of HIV/AIDS influences HIV testing behaviour? Examine: a) whether perceived severity of HIV infection triggers HIV testing; b) (or in contrary) people are afraid to find out that they are infected and refrain themselves from testing.
Perceived benefits	How understanding the benefits of knowing HIV status promotes HIV testing behaviour. Examine, understanding of personal benefits as well as benefits to significant others –as a factor influencing testing decision.
Perceived barriers	Examine barriers on individual, institutional and societal levels. Explore: how anticipated HIV-stigma, and the expectation of rejection or discrimination against HIV+ persons may serve as a barrier to HIV testing; privacy concerns; confidentiality concerns; testers’ attitude; unfriendly environment, accessibility issues, etc.
Cues to action	Explore potential facilitators to HIV testing: a test offered during public campaigns; a test offered by a healthcare provider as a routine care; a change in sexual partner, etc.

11.Fan, H., Fife, K. H., Cox, D., Cox, A. D., & Zimet, G. D. (2018). Behavior and health beliefs as predictors of HIV testing among women: a prospective study of observed HIV testing. *AIDS care*, 30(8), 1062–1069. <https://doi.org/10.1080/09540121.2018.1442555>
 12.Nöthling J, Kagee A. Acceptability of routine HIV counselling and testing among a sample of South African students: Testing the Health Belief Model. *Afr J AIDS Res.* 2013;12(3):141-150. doi:10.2989/16085906.2013.863214
 13.Ofori, Kennedy Nyeseh. (2019). Application of the Health Belief Model to HIV Testing and Counselling Among Youth Living in Selected Rural Communities in Ghana. *International Journal of HIV/AIDS Prevention, Education and Behavioural Science.* 5. 11-18. 10.11648/j.ijhpebs.20190501.12.

Domain II: Exploring perspectives of various target audiences about preferred HIV testing models

The second part of the instrument, explores perspectives of target groups about preferred HIV testing models. Questions are asked to find out what are the factors facilitating people’s decisions to get tested, and define testing models that are likely to trigger positive behavioural changes and motivate people to undergo HIV testing.

To increase HIV testing uptake in Georgia, recently health officials and other stakeholders started promoting HIV testing within primary health care settings, as well as introducing HIV self-tests, as an alternative option for those reluctant to get tested. Acknowledging high importance of these initiatives for the national HIV response, our study decided to include few questions about the topics and seek to generate original data about the acceptability and feasibility of alternative testing options in Georgia.

In addition to the main study tool, each respondent was asked to complete short structured questionnaire that included several questions regarding their HIV testing experience and their expectations for self-testing services.

STUDY TARGET GROUPS AND GEOGRAPHICAL AREA

Qualitative study was carried out in 3 cities of Georgia, namely: Tbilisi, Batumi and Zugdidi. The study focused on 5 groups: healthcare workers, HIV positive people (HIV+); Men who have Sex with Men, People who Inject Drugs, and Sex Workers.

Focus group discussions were carried out in almost all target groups (MSM, SWs, PWIDs, medical personnel); although, due to the sensitivity to HIV-positive status, in-depth individual interviews were conducted with People Living with HIV. Detailed information about the FGDs and IDIs planned for each target population group in each city is presented in the table below:

Table 1. Structure of Focus Group Discussions and In-depth Interviews by the city sites and target groups

Target group	Tbilisi		ბათუმი		Zugdidi	
	IDI	FGD	IDI	FGD	IDI	FGD
HCWs		1				1
PWIDs		1		1		1
SWs		1	2			1
MSM		1		1	2	
HIV +	2		2		2	

Inclusion criteria for the study participants were as follows:

- Age: 18 years and older.
- Residence/employment in one of the three cities: Batumi, Tbilisi, Zugdidi.
- Compliance with characteristics of the study target group.
- Willingness to participate in the study.

ETHICAL ISSUES

The study protocol, questionnaire and informed consent form were reviewed and approved by Health Research Union Committee for Bio-medical Ethics (IRB00009520, IORG0005619) (Certificate # 2020-8, 08/06/2020).

The following ethical issues were taken into account during the study planning and implementation process:

1. Participation into the study was voluntary; participants were free to refuse to participate at any time.
2. The principle of anonymity was thoroughly adhered to. Identities of the participants were not recorded. Study documentation identified the respondents' numbers only.

DATA COLLECTION AND ANALYSIS

By prior agreement with the respondents, the focus group discussions and in-depth interviews were audio-recorded. Upon completion of the fieldwork, detailed transcript of each focus group discussion and interview was prepared using audio recordings. The computer program ATLAS.ti processed data to identify qualitative aspects of key trends, based on which the study data was analyzed. The data collected within the qualitative study are presented in this report thematically, organized into subsections.

STUDY FINDINGS

Characteristics of the study cohort

The study fieldwork was conducted in August 2020.

Overall 75 persons were interviewed. 23 of them were members of the HIV-affected group, and 13 were medical personnel.

Table 2: Cohort study participants by the groups and gender identity

Study participants by groups	Number of study participants	Mean age of study participants
MSM/LGBTQ+	15 (14 men, 1 other)	23 years
FSW	16 women	41 years
IDU	22 (18 men; 4 women)	40 years
HIV	6 (2 men; 3 women; 1 transgender)	32 years
Healthcare worker	16 (men 3; women-13)	53 years
Overall	75 respondents (out of them 36 women)	

Absolutely all respondents mentioned they have been tested for HIV at least once and are aware of the test result. However, in last 12 months, only 50 respondents underwent testing; 19 noted they had not been tested for HIV in the past year. Interestingly, of those who had not been tested for HIV in the past year, majority were injecting drug users (PWIDs - 13; medical personnel - 5; sex worker - 1). Besides, although 9 out of 13 PWIDs realize they have high risk of acquiring HIV, they have not been tested in the last year despite the perceived risk.

PERCEIVED VULNERABILITY

Perceived vulnerability: key populations

Vast majority of the qualitative study participants are aware of the risk factors for HIV and list variety of reasons that may expose the person to the risk of being infected: unprotected sex, condom damage, frequent change of partners, shared needles, medical manipulations.

Study participants also talked about the ways of protection; in particular, representatives of key populations know that regular condom use protects a person from being infected. They are aware of the risks associated with sharing injection equipment. Specific groups are informed that there is pre-exposure prophylactic treatment available to prevent the virus transmission.

Majority of respondents with high-risk behaviours believes they are at risk of acquiring HIV. It is noteworthy that part of the respondents assess the risk factors for HIV based on their affiliation to the specific groups (sex worker, MSM).

“ *Respondent: I think so too, because the sex worker is at the high risk. No one is insured, but a sex worker is at greater, higher risk.*

Respondent: I am in the risk group because I belong to MSM group where it is most prevalent. I am in the risk group indeed.

However, one of the respondents, who represents MSM group, mentioned he is less at risk due to the fact that he constantly uses the condom and is involved into the PrEP program; despite the low risk, he notes that he still periodically undergoes HIV testing.

“ *Respondent: I personally because [referring to why he thinks he is at lower risk] I have less risky behavior, I use condom, take tests, and I am the prep user.*

Part of the respondents say they may be aware of the risk of infection, but knowledge is not always related to safe behaviour. For instance, despite correct perception, one respondent stated he could not always control his behaviour. Part of the respondents point out that some coincidences may pose an unforeseen threat to the person; for example, condom failure.

“ *Respondent: We all are at risk, since we deal with the needle. We protect ourselves in every way, but there are still chances to get it... you do not always think about everything ... sometimes you are courageous and do not think about risks.*

Respondent: Even though I always protect myself, but I still have some concerns, especially if the condom breaks.

It is likely that sometimes people assess the risk of infection not considering the surroundings, based on their own behaviour only and do not take into account the social context or the possible risky behaviours of the individuals with whom they cohabit. One of the HIV-positive respondents stated she did not feel at risk of infection and found out her own HIV status during pregnancy. As she claims, she was infected by her husband who knew he was HIV positive but did not disclose this to her.

“ Respondent: Yeah, my husband just did not tell me before, although he knew it perfectly well, so I learned it during pregnancy.

Study participants point out the level of HIV awareness in the general population as well as in certain vulnerable communities is insufficient, which is why people misjudge the risk of infection and do not refer to testing services.

“ Interviewer: What role do you think the correct assessment of the risk of infection plays in the person's decision to get tested for HIV?

Respondent: If a person understands correctly, in my opinion, he will definitely check himself ... In my opinion, they themselves do not know what protects them. If they knew correctly, they would undergo the testing.

It was interesting to hear opinion of a transgender woman who noted she was well informed she had high risk of HIV since she was involved in sex business. However, she stressed out that employment opportunities for transgender people in Georgia are very limited and they have no other choice.

“ Respondent: I knew I was at risk of infection, since I was a sex worker, and as you know, there is no other opportunity for transgender woman to get employment in Georgia.

PERCEIVED VULNERABILITY: MEDICAL PERSONNEL

Medical personnel consider they are at risk of acquiring HIV during manipulations involving contact with blood and other biological fluids, however, emphasis was made on universal safety precautions and standards that ensure the chances of getting infected from the patients are minimized.

“ Respondent: Doctors in general are at risk. I myself, as an inpatient physician, have to deal with HIV-infected people, carry out various manipulations, and there is a chance the needle will bite and there were some similar facts at the clinic. However, everything ended well.

Respondent: In my case, even though I work directly with the highest at-risk populations, i.e. those living with HIV, I still think the risk is very minimal. We always use gloves, follow all safety precautions supported by the standard. It can happen, of course, but 1 case in a million, at least.

One of the respondents, the healthcare worker, indicated aggressive HIV-positive patients who could intentionally infect the doctor with a contaminated needle, as another risk factor for HIV infection, bringing the prison case as an example.

“ Respondent 2: Aggressive patient can also infect the doctor. There were several such cases in the prison, when the doctor was pierced with a needle intentionally.

Although this particular statement might not be generalized to the medical personnel, it does suggest that such stereotypes and myths are still actual, 'demonizing' people living with HIV. Those further reinforce meaningless fears and increase the chances of expressing the stigmatizing attitudes.

PERCEIVED SEVERITY OF THE DISEASE

Large proportion of participants does not consider HIV to be a dangerous disease since if the person is timely diagnosed, starts treatment and adheres to the treatment regimen, the lives of those infected are less endangered. The majority of respondents talks about HIV as the manageable disease, and the socio-psychological aspects related to it become appear more prominent, than the health-related aspects.

When talking about severity of the disease, respondents are more likely to highlight fears associated with HIV, stemming from the attitudes and stigma within society. Fears refer to issues such as exclusion, stigma and discrimination; as well as uncertain future in case of a positive test result.

**“ Respondent: I do not even consider it dangerous if the person is controlling this condition appropriately.
Respondent: It is not dangerous at all, if it is detected in time...**

Respondent: The main point is to detect it in time and the patient to follow the doctor's instructions closely. It is still dangerous disease, but it is no longer a deadly diagnosis today, it is no longer the verdict as it was before ... it is solvable.

In addition, some part of the respondents are optimistic and believe AIDS can be cured as it became possible to cure hepatitis C recently through effective medical treatment.

“ Respondent: I myself, personally, do not consider HIV dangerous and I do not know what others think or what they say. There is possibility of diagnostics, and treatment available, and eventually they will probably invent something to let it be like the flu. The flu may happen and you will recover, well. As even hepatitis C. Is it currently curable? They invented it, right?

Although they consider HIV/AIDS a manageable disease, respondents suggest that fear associated with HIV/AIDS is multifactorial and relates to psychological, emotional, and social problems that infected individuals may face. The following factors were noted the most often: exilement, stigma, discrimination, fear of the uncertain future, delayed diagnosis, which may make treatment less effective; fear of progression of various concomitant diseases.

“ Respondent: It is no longer as dangerous in terms of health as it is in the social context. Socially yes, since too many people even in this period where we all live in an equal world, but can marginalize you, if you are HIV positive. There are also some dogmatic and stereotypical approaches that it may, to put it simply, be transmitted through a kiss so they would not kiss you.

Respondent: It is even more dangerous in the social context, since it can drive society away from you. You would not tell everyone you are infected with HIV... The public looks at it very negatively. If they learn that the person has AIDS, unless this person is not their family member, they judge him/her and try to avoid.

Respondent: It is still a dangerous disease because it takes long time to be detected. If you do not get tested, there may be no signs, and when it is detected at last, it is well developed and far too late.

While discussing severity of the disease, respondents note that the diagnosis is accompanied by the fear that they may transmit the infection to others.

“ Respondent: I think it's even more dangerous because before I know I have this disease, I can pass it on to someone else.

Speaking to HIV-positive respondents, it was obvious that their attitudes towards HIV/AIDS before and after getting infection were different. They point out fear and despair that have been replaced by the rational perception of reality. They admit that this change is due to acquiring more information in this regard.

“ Respondent: I have learned everything about this disease, absolutely everything, and now many years have passed, and I am OK, having no complaints, like an ordinary person.

Focus group discussions with the medical personnel highlighted that they perceive AIDS less as a life-threatening disease, and focus more on severe consequences of diagnosis that occur at the social level. They point out that severity of the disease is due to the negative attitude of the society towards infected persons.

During discussions, it was suggested that young people under the age of 25 demonstrate much tolerant attitude towards people living with HIV than those over the age of 25. Moreover, the attitudes of rural and urban population were different, and it was suggested that urban population is much more tolerant than rural, since the city provides better access to information rather than the village. However, the views expressed underline that low awareness is directly correlated with manifestations of negative attitudes towards infected persons.

“ Respondent: I would, for example, divide society by two attributes: people somewhere above their 25s and under 25s, since young people have a lot more information and tolerance. And I would divide the urban and rural populations as well. The city inhabitants are higher educated, have more information and therefore have more loyal attitude towards the patients.

PERCEIVED BENEFITS OF TESTING

Majority of the study respondents are aware of the benefits that come with timely HIV testing and knowledge of HIV-positive status. They point out the benefits are multifaceted, manifested either at both individual level and social and economic levels.

The following benefits of HIV testing are noted the most commonly:

At the individual level: timely diagnosis is prerequisite for timely involvement into treatment and best care options for the health.

“ **Respondent:** *Why [HIV testing] is needed and first of all, to cares about your health; secondly, as I said in the beginning, take care of your friends and everyone within the 'circle' and first of all your own health.*

Respondent: *In case of positive result start treatment on time, and in case of negative not to get infected...*

At the micro-social level: as a result of testing, the person learns own HIV-positive status, which allows to protect others, including family members, partners or other members of the community from getting infected. The PWIDs talked about precautions to prevent so-called 'syringe friends' from the risk of virus transmission.

“ **Respondent:** *Family, spouse and children. You want your family to be protected in every possible way.*

At the community level: It is also noted that detection of HIV-infected people may reduce the spread of HIV within the community and improve control of HIV epidemic in the country.

Healthcare system/economic level: Some respondents also realize the benefits of timely testing are reflected at the level of healthcare system and the country's economics. In their opinion, timely diagnosis means less severely ill patients who will need less resources for their treatment, thus the better outcomes are achieved at the lower cost. In addition, epidemic control generally means fewer infected people and less needs for their treatment or care. Respondents note that this will save some budget funds, which will have positive impact on the country's economics.

“ **Respondent:** *If all people start regular testing, we would no longer have so many viruses spread. Consequently, it will have positive impact on the country level healthcare, since if the prevalence is reduced, then the state will no longer have to spend so much on the medicines and treatments.*

BARRIERS TO HIV TESTING

It should be noted that factors hindering HIV testing turned out to be the most sensitive issue for the study participants. These factors are mentioned while discussing all stages of HIV testing, starting from referring to testing and including selection of the ways of HIV self-test delivery. Talking about barriers to HIV testing with the key population groups revealed several key factors that demotivate people to seek the testing services.

Non-private environment: Majority of study participants noted their privacy was not assured during testing. They said that sometimes the testing or counseling process was attended by another, third person, which creates uncomfortable environment to talk about sensitive issues and private topics.

“ **Respondent:** *Those who are not directly involved into this topic and neither provide you with information, nor test you, this [attendance of such person] will certainly make me uncomfortable... even with regards to confidentiality. Such person may even know me personally.*

Respondent: *Isn't it possible that you do not know him but he knows you.*

Test Results Delivery Form: Another important barrier listed is HIV test results notification form. Respondents noted that positive and negative test results are not delivered through a standardized procedure. One of the study participants named particular clinic and shared his experience with them. He noted the positive result of the test are delivered in a different way, so it is easy for everyone to guess who is positive and who is not.

“ **Respondent:** *[names the medical institution] every time they do the test they scream into the corridor, (name) you do not have anything. Why should you scream? And those whose names are not screamed out, they may be HIV positive... and you also know that suspicious positives are asked to proceed to the room. I have such experience on my own*

Low awareness of HIV treatment as the barrier to testing: Respondents think people do not have enough information regarding possibility of treatment and its effectiveness. Some prefer not to be aware of their own HIV-status, since they see only despair and hopelessness afterwards. Respondents say it is extremely important to explain to people that there is free and effective treatment available allowing those living with HIV to live a quality life. In their view, providing such information will remove the barrier posed by ignorance of HIV treatment and increase motivation to get tested for HIV.

“ **Interviewer:** *You told the story and said that many people are afraid the test result will turn out positive (i.e. that they will turn out HIV positive), how much do these fears affect the person in decision making with regards to the testing?*

Respondent: *Yes, that is why we should include into the information messaging that if the person is positive, there are drugs you take and you will live like an ordinary person. It should be explained very deeply that those drugs reduce the virus down to zero, and in practice you are considered to be healthy and so on.*

Fear of getting the diagnosis as the barrier to HIV testing: Fear of getting diagnosis was often referred to when talking about barriers to HIV testing. These fears reflect not only the risks for health, but also the other, negative consequences such as stigma and discrimination; breach of confidentiality; exclusion from the community; fear of an uncertain future, including fear of not being able to start the family life, losing the job or opportunities to be employed; also, fear of potential financial losses.

“ Respondent: Some may be afraid that employment problems will arise.

Respondent: Yes, sure. Some job vacancies require the official HIV certificate: like military, police, waitress, beauty saloon work, etc.

Respondent: In my opinion, the most important barriers are lack of information, public attitude towards people living with HIV and self-stigma, which is very widespread even today. Fear that I will not be able to start the family, the friends will turn their backs on me, I will never be able to get the job, etc. Thus, if you ask me, stigma and self-stigma are the most serious barriers to HIV testing.

Restricted geographical accessibility as the barrier to HIV testing: study participants believe that HIV testing in cities is not a big problem, but they believe regions and villages are left out of focus. Problems in small towns and villages related to assuring privacy and confidentiality were also mentioned, since almost everyone living in the small towns and villages knows each other, and therefore testing may be disclosed and become the issue for rumours.

“ Respondent: I have some business in the regions and they prefer not go to the doctor there ... what if the neighbor learns or if someone says something? A relative, mother-in-law and whoever that may be - they would learn about this. Consider yourself the outcast. That is, you are either a prostitute, or a drug addict. In what other cases should it happen to you? Either one, or the other, or the third. There are small neighborhoods, everyone knows each other and testing there means everyone knows your result.

Dire socioeconomic status as the barrier to HIV testing: speaking of HIV testing barriers, it was suggested that the dire socioeconomic status negatively affects the motivation to take care of own health. Unsatisfied basic needs such as food, housing, unemployment, etc make healthcare issues less prioritized. Fear of financial burden related to the disease was also acknowledged as the barrier by one of the study respondents.

“ Respondent: There are too many problems that hinder the person. Even the absence of willingness to know own HIV status, or having much more problems than HIV might be for him, and therefore no desire to get tested at all... When he is financially so short that no longer thinks of anything else, not even about health.

Respondent: ... and also ... the economic side. Many may not even know what services are available in case of infection and think, what if I am told I am sick and could not take care of it, treat it.

BARRIERS TO TESTING SPECIFIC TO THE HEALTHCARE SYSTEM

Barriers of the healthcare system were considered from two different perspectives: from the perspective of service recipient key populations and from the perspective of service providers (medical personnel). The perception of the current situation turned out quite different from the point of view of these two qualitatively different groups of study participants.

Medical personnel mostly stated "there are no barriers in the system"; they claimed the medical institutions they represent are free from stigma and any other barriers.

“ Respondent: We have no different treatment of any patients, all patients are equal to the doctor and there are no different attitudes towards the person depending on whether he/she has risky behavior or not, whether he/she is infected or not.

Particularly clear statements were made by the specialized medical personnel, working in frequent contact with people living with HIV:

“ Respondent: What do you say, where are we and where is stigma? How can there be stigma in the medical facility?

INSUFFICIENT KNOWLEDGE OF MEDICAL PERSONNEL

Medical personnel claim they have undergone relevant training, collected relevant certificates awarded by the Center for Disease Control and are therefore ready to provide quality testing and counseling services to the key populations.

Meanwhile, during the focus group discussions, some medical professionals shared their opinion, that level of knowledge of their regional colleagues on HIV/AIDS and hepatitis C issues is very low.

“ Respondent: In my vision, knowledge on these issues within medical personnel is quite low or very superficial.

However, one of the group members expressed the opposite opinion, noting that primary health care physicians working in the regions are well-trained on TB and hepatitis C issues and their attitudes are quite adequate as well. According to this participant, the training was conducted as part of an integrated management program and covered hepatitis C, HIV/AIDS and Tuberculosis topics. The training was not mandatory, though covered actually the entire primary health care across the country.

“ Respondent: Yes, it was an integrated management program, dealing with hepatitis C, HIV and Tuberculosis, which was not mandatory but practically covered the entire primary health care sector. For these trainings we traveled all over the country, stayed in the regions for the few weeks and I think we provided with the very good information. So obviously more is needed, but we are not really in a bad situation right now.

It is obvious that this particular respondent was probably involved into the training provision himself and thus his opinion may not be objective. However, almost all participants were unanimous in recognizing that the training of medical personnel should become an ongoing process.

“ Respondent: It is true, I would just mention the only thing that we achieved really good results, but it is the matter of continuous work, it needs maintenance, consistent support, knowledge - consistent updating and sharing news.

Unfortunately, the knowledge, attitudes and practices (KAP) survey among the medical personnel has not been held in Georgia and it is difficult to determine how objective the respondents' perceptions of healthcare workers' HIV awareness really are.

The perception study was not testing medical personnel's knowledge on HIV/AIDS on purpose, however, focus group discussions identified unawareness of certain key issues, such as when and under what conditions HIV positive status can be disclosed to other medical personnel, partner or family members.

During focus group, participating medical providers discussed with each other rights and responsibilities of medical personnel in the process of notifying an HIV-positive person's partner. Some of the participants firmly claimed they have no right to report the status of an HIV-infected person to his/her spouse or sexual partner, though the Georgian Law on HIV/AIDS¹⁴ states that medical personnel is required to notify sexual partner (if his/her identity is known) about HIV positive status, if infected person does not deliver information to the spouse/partner himself/herself.

Discussion between the medical providers:

- I wonder, when HIV test is positive for the patient and, for instance, he has a wife and is diagnosed with HIV, then how do you do it? Are not you obliged to notify his wife?

- No, we are not.

- But what if he does not tell his wife, hide this from her ... and transmit the virus?

- Yes, he can, but we do not control it. We are not obliged and have no right to notify others about his status.

The focus group, the dialogue also revealed that some medical providers do not know under what circumstances physician could be notified if their patient has confirmed diagnosis of HIV/AIDS. This issue is also under regulation by the Georgian Legislation on HIV/AIDS¹⁵, which clearly states the doctor should be informed about the HIV-positive status of the patient only if this information is in the interests of the patient's treatment. These specific examples show that medical personnel is sometimes uncertain and incompetent on HIV-related issues, however, it is hard for them to acknowledge this during discussion.

FGD demonstrated that larger proportion of medical personnel would rather be cautious when reporting HIV-positive status. However, facts of violations in the healthcare system exist, as evidenced by the experience of one of the infected respondents, whose status was disclosed by the doctor to her mother. Yet, the respondent qualified this as medical provider's mistake/undesirable behaviour rather than violation of the law:

“ Respondent: I went away to Kutaisi, I was expecting another diagnosis, I did not even think of it at all [about HIV]. Then my mother went for the results. My mother was asked into a separate room. The doctor was a man, I do not remember his name. When he told my mother my test result, my mother has got the facepalm...

Interviewer: Do you think the doctor should have told HIV test results to you, rather than to your mother?

Respondent: No. It was better to tell me, to prevent my mother from getting nervous. I, in my own turn, would speak appropriately to my mother then.

Thus, even superficial observations during the study demonstrated that the knowledge of medical personnel regarding HIV-related regulations is insufficient and, thus, the physicians' mistakes are not excluded, which would oppose to the rights of the patient, as well as the Law of Georgia on HIV/AIDS.

14. საქართველოს კანონი აივ/მიდის შესახებ <https://matsne.gov.ge/ka/document/view/90088?publication=4>

ATTITUDES OF THE MEDICAL PERSONNEL

While medical personnel speak of the stigma-free environment in medical institutions and absence of substantial barriers, key populations describe medical providers as indifferent and unethical. This assessment was agreed upon by almost all participants in the focus group.

“ Respondent: In my opinion, in the best case they are just indifferent and in the worst case they make us feel we are not the desired patients.

The attitude of some physicians became clear while revealing the common stereotype voiced by one of providers, when he linked HIV vulnerability of medical personnel to possible aggressive behaviour of HIV-infected individuals and attempts to deliberately infect others (see Perceived Vulnerability).

It should also be noted that some of the study participants, based on their own experience, describe medical personnel as calm and friendly. It looks likely that the experiences of the key populations are different, and different types of medical facilities respond differently to HIV-sensitive issues.

Most healthcare professionals report that personnel has correct and healthy attitude towards high-risk groups. However, the different view was also expressed that medical personnel, particularly primary care physicians, were not prepared to work with the key populations.

“ Respondent: If we mean medical facilities generally and not specified medical institutions, then, in my opinion, the primary healthcare system is not totally ready to provide high quality counseling to the people with high risk behavior. Those of you here who are the counsellors, you know very well that it is rather difficult to carry out high quality counseling. Moreover, not sure how friendly the personnel will be if a transgender person refers to a PHC clinic.

Representatives of high-risk behaviour groups talk about discriminatory and non-friendly attitude from the medical personnel. They point out that such attitudes create an additional barrier to the healthcare services. They think it is possible in a technically well-equipped clinic that knowledge and attitudes of the medical personnel is incorrect, which affects directly the quality of the service provided and has negative influence on the trust towards the personnel and referrals.

“ Respondent: It may be very good clinic by itself, that is, it may have every infrastructure to carry out testing, but it is very important who the test takers are, how they care about the minorities, what their attitude towards the minorities is. If they are sceptical, of course, it is better to refrain from testing over there.

THREAT OF CONFIDENTIALITY AND PRIVACY BREACH

Although the key populations talk about fear of confidentiality breach and non-private environment in the clinics, those have not been considered as the barriers to testing from the side of medical personnel. Only after being asked directly by the moderator whether the fear of confidentiality breach constitutes the barrier to testing, one of the study participants stated that if their facility confidentiality is preserved, all manipulations are performed with the

patient's verbal informed consent, and the test result notification is done by the same person who provided pre-test counseling and testing itself.

“ Respondent: It is well known that [privacy] is important. We tell everyone that their information is confidential and very strictly protected. During pre-counselling, nothing can be done without the patient's verbal consent. When we offer the test for hepatitis and HIV, we provide all the information and the person decides whether to get tested or not. Of course personal data is recorded, since we have to provide the results, to make referral if infection is detected, but this is done only with the patient's permission. Anyway, confidentiality is protected at the highest level. If it is my patient, only I have to notify him/her in person, we never notify by phone or other means.

TESTING WITHOUT INFORMING AND/OR COUNSELLING THE PATIENT

According to service recipients - representatives of the key populations, they were not provided with VCT services in medical clinics, while service providers indicate clinics so offer HIV testing with pre-test and post-test counseling included.

Representatives of the high-risk populations claim the person in the medical facility may be tested for HIV without being informed, which is mainly denied by the medical personnel.

INSTITUTIONAL BARRIERS: IMPROPER INFRASTRUCTURE AND INADEQUATE REMUNERATION OF MEDICAL PERSONNEL

The only hindering factor recognized by both the healthcare and key populations' representatives is improper infrastructure in the clinics, in particular lack of sufficient space, lack of comfortable and private environment.

The study revealed other experiences as well, when in clinics (mainly at the regional level) the patient is not face to face with the doctor and does not have the opportunity to speak privately, since other medical personnel may also be attending the doctor's office. Respondents talked about the fact that the infrastructure of the facilities is often improper - the room is not properly arranged and isolated, and the ongoing communication may become known to the third party. As the participant noted, due to such situations, the doctors try to find different ways to create comfort for the patients, for instance, to find free, alternative space for communication with the patient, or to make appointment at some particular time.

“ Respondent: We have already emphasized confidentiality, but there are no proper conditions everywhere. For example, in some places the nurse is attending the office beside the doctor. In some places it is a separate room, but it may have the window and you can hear the conversation. This mainly happens in the regions, where there is not enough space for the personnel. But personnel handles it differently. Either finds free space, or, for example, such situation may arise while giving medication, so they agree in advance with the patients to avoid breach of confidentiality.

Healthcare workers noted that the primary healthcare system has been involved into HIV testing services recently, thus their workload increased. Nevertheless, their remuneration remains unchanged. Respondents noted that low pay for nursing staff could adversely affect their motivation and therefore fail to provide friendly service.

“ *Respondent: ... low salary. When wages are low, motivation is also low. I want to say that when we, the outpatient doctors get workload increased, the salary does not increase, some funds should be added to the salary at least..*

AVAILABILITY OF TESTING

While discussing barriers to testing with medical personnel availability of free HIV testing in medical facilities was pointed out. Interestingly, healthcare workers do not have, or have different information regarding availability of HIV testing. One participant notes free HIV testing is only available if a person tests positive for hepatitis C; the second argues that screening includes free testing for HIV and hepatitis C in medical units selected by the Public Health. They also talked about the fact that free HIV testing is available to all patients admitted to the primary healthcare clinics.

“ *Respondent: Let me finish and then talk. I will tell you from my experience: with us, as the Center for Disease Control has introduced the tests, it is done only for patients who are positive for hepatitis C. That is, with those who are not positive for hepatitis C, we will put the topic of HIV aside.*

Respondent: I would say, when testing became available here for the first time, everyone absolutely got free access to hepatitis and HIV, regardless of age, then some age limits - were introduced, then - if positive for C, only those were tested for HIV. Now again everyone is getting it, without any restrictions.

As for the key populations, they are informed about HIV testing centers. They know free HIV testing is available both at the NGOs and medical facilities. However, they emphasize the geographical availability of testing centers is different, especially in the regions.

HIV TESTING - CUES TO ACTION

Respondents talked about how a person makes HIV testing decision. Four main stages of decision making were identified during the discussion:

Stage 1: Fear and lack of information about both HIV and service providers;

Stage 2: Starting searching information on HIV and service centers and assuring that service provider is friendly and keeps confidentiality;

Stage 3: Firm decision to overcome fear;

Stage 4: Referring to HIV testing.

“ *Respondent: At first there was fear, before I got by first test, that was years ago, because I was not educated, I did not know, what was society’s attitude, I did not know, whether it would be confidential or not. I said from the very beginning, all these causes fear, and people do not want to get tested. But, once you see that, be it non-governmental or medical facility, that there they treat you like family, then making decision in relation to this becomes easier. It was easier for me with them.. [names several social workers from a NGO] to do it..*

Respondent: Before I made decision to get tested for the first time, I was very scared, I did not know then a lot of things about this disease and was interested, what if I had it and what would I do then. Then, I decided it was better to overcome this fear and learn rather earlier than later if I had something and take care of myself. And once I got tested and it was negative, I was not afraid after that.

Key populations listed several main aspects, related to HIV testing, as cues to action:

Awareness: Correct knowledge about benefits of testing and possibilities of treatment. Information about HIV testing centers and trust that the testing center will provide decent service guaranteeing privacy and confidentiality.

Possibility of free testing: All survey respondents note that there shall not be any financial barrier to HIV testing and services for the patients shall be free of charge. Representatives of the key populations are well informed about free testing possibilities in Georgia. However, opinions of the medical staff varied.

Service of accompanying to the testing: Many respondents suggest that the person may find it difficult to go testing alone and being accompanied by someone will make it easier to come up with decision. Particular emphasis was placed on the social worker accompany service. They said testing is getting easier when supported by emphatic social worker who is well-informed regarding the testing process and knows how the person needs to behave after receiving even positive test result. Moreover, the social workers are well-trained and they can offer you primary support at the most critical stage. Respondents also talked about preferable accompaniment supported by the friend or family member.

“ *Respondent: If a social worker accompanies you, it is very helpful, since he/she is more informed. I still went together with the friends. Three friends we went together and took the test.*

Comfortable and friendly environment: Majority of respondents state that comfortable and friendly environment reduces the testing threshold and increases the person's motivation to take the test. In their view, friendly environment implies warm and easygoing attitudes from personnel; as well as an environment free from dogmas, stereotypes and stigma. Pleasant design and cleanliness are also important to many respondents. The emphasis on compliance with sanitary and hygienic norms can be explained by the fact that many people living with HIV openly talk about inappropriate conditions in certain medical institutions.

“ *Respondent: We mostly love people when they treat us warmly and when you feel some warmth, you become more open. Thus, it's important to feel very warm attitude, be warmer and so on.*

Respondent: Cleanliness, compliance, cleanliness, should everything be in order now, right? Cleanliness.

Someone's Success Story: High-risk individuals point out that someone else's example may be acknowledged as encouraging and motivating factor. Direct contacts with infected people who are willing to talk openly about their experiences are utmost important; those who disclose their status and encourage their peers by own behaviour show they are treated successfully and despite being HIV positive, feel practically healthy and continue to live with the full life.

“ **Respondent:** *I affected on few of my friends, but I did not get the sad story. I said I am HIV positive, I do not hide my status; I know I should not hide. I always tell any of my partner that I am HIV positive and I think my status does not change my life. It played big role to my friends in taking the test. When I said that I am infected, started treatment and have no complex problems any more... They also decided to get tested since this virus is not that much dangerous and they should not be afraid of result.*

Starting relationship with a new partner: Several representatives of the risk groups stated that sometimes starting relationship with a new partner becomes motivator for HIV testing. In such cases many people try to start safe relationship and it is possible that both partners encourage each other to get tested.

“ **Respondent:** *I have several friends, who get tested, when they start relationship with a new partner, and they force this partner to get tested too.*

Routine testing and massive screening: US CDC¹⁵ and other competent institutions declare that offering routine HIV testing in the healthcare sector will increase numbers of testing and improve HIV detection. This is known as opt-out approach, which implies that service providers inform patients that HIV testing will be done together with other tests within routine screening package, except cases when patient refuses to get tested. Hence, our survey was interested to learn, whether this testing strategy would be acceptable for the participants and would increase testing rates. While discussing this issue, the respondents expressed different opinions. For part of the survey respondents, massive screening is attractive and comfortable, but for part of them it is connected to lack of privacy and fear of confidentiality breach.

“ **Respondent:** *By the way, a lot of people do not agree [to take part in massive screening], because they are scared. They think that, even for the hepatitis, if I get tested here and everyone is looking, what if I were positive and everyone would learn my status.*

Respondent: *During massive screening it is more spontaneous. They see, that one gets tested, then another... Then someone follows this example, the fourth, the fifth and so on and it is good.*

Respondent: *Some people might want to get tested, but are busy and cannot manage to go for testing, so such screening, when one does not have to go somewhere especially for this, and can do it on the spot, spontaneously, randomly, whenever he/she is, probably, for a lot of people this is convenient.*

15. Centers for Disease Control and Prevention. Evaluation Toolkit: Patient and Provider Perspectives about Routine HIV Screening in Health Care Settings. <http://www.cdc.gov/hiv/topics/testing/healthcare/index.htm>. Published March 2012. Accessed 09.12.2020

HIV negative test result, as behavior change motivator: When talking about behaviour change after HIV testing the respondents noted that for some negative HIV test result prompts safe behaviours, so that virus-free status is maintained; however, some respondents had opposite opinion and said that sometimes HIV negative test result makes people more daring, so that they lose caution, do not protect themselves, thus encouraging risky behaviour.

“ Respondent: . . .In my opinion, when they learn they are clean and do not have anything, I think, they would take more care of themselves. For example, I am like that, I become more cautious, but I have seen a lot of girls, who, having learned that they do not have anything, stop using condoms and protecting themselves at all.

Respondent: No, it has opposite influence on a person, if he/she becomes sure, that he/she is not infected, then has more risky behavior. In my close circle, a friend who got tested several times and his answer was negative, decided that he could have unprotected sex and it was OK.

EXISTING AND DESIRABLE MODELS OF HIV TESTING

Medical personnel from primary healthcare unanimously note that primary healthcare has contacts with the big part of the general population and there is potential to reach broad groups with testing. Hence, they believe that primary healthcare centers can become main pillars of HIV prevention.

Medical personnel expresses satisfaction with HIV testing model existing in the primary healthcare. While discussing this model, it turned out that not everyone is offered pre-test counseling, usually they provide brief information and conduct testing, have as a reason that “Those who know, what kind of testing we offer, are immediately agree”. Respondents highlighted that they provide pre-test counseling only in those cases, when a patient does not agree to get tested on HIV, or when a person is positive for hepatitis C virus.

“ Respondent: This model, which works now, is fully acceptable, and quite simple. Every patient is offered testing and there has never been a case of refusal, everyone gets tested. Family doctor provides counseling, gives information and then plans a visit to get the test result. Then, the same doctor tells the test result and, in case of necessity, refers to appropriate facility.

During discussion with the medical staff, it was revealed that they do not have particular indication, when and with which groups of population HIV testing shall be done. They note that they have a plan, are given particular number of tests, which they have to use, and then present a report. So, the medical staff say, that they test all visitors of the clinic on both infections – hepatitis C and HIV. Yet, they cannot recall, approximately how many HIV positive cases are identified by screening program of the primary healthcare.

Key populations have slightly different opinion about integrating HIV testing into the primary healthcare system. When sharing their experience of getting tested in clinics, they noted that pre- and post-test counseling is not provided. Hereby, they confirm that counseling shall be an important component of HIV testing. They state, that counseling is important not only for informing a person, but it also provides possibility of gaining trust. Also, they are skeptical about possibility of family doctor providing HIV counseling at the primary healthcare centers. The respondents think, that family doctors do not have time for this, and counseling and testing should be done by another personnel. In some respondents' opinions, counseling shall be provided by a psychologist, doctor, psychiatrist or a person living with HIV. Several respondents stated, that it is better if a psychologist gives out HIV positive result, since the psychologist would be able to do this in a less harmful way for the patient's mental health.

Besides, representatives of the key populations say, that very often HIV testing at medical facilities is conducted without informing the patient. So, the patients learn about this only when they get HIV test result together with other results of the examination.

“ Respondent: They did not ask [consent to get tested], they said, let's do all tests that are obligatory, and that was it. They did not ask, I agreed to get a test or not.

Respondent: In general, it's like that, when you go to an ambulatory or to a hospital, they conduct tests directly and then give you a paper and tell you: you've got this and this.

Testing services at non-governmental organizations and medical facilities.

The survey was less interested in testing models implemented by non-governmental organizations. In the country there are civil society organizations, including community organizations, that provide testing services to the key populations for about twenty years. Representatives of the communities often are employed at these organizations. Their staff has been trained and there are not even anecdotal data about stigmatizing attitudes towards the key populations. Hence, there is already solid evidence that HIV testing in civil society organizations is an acceptable model for the key populations. Based on this, the survey focused on studying respondents' opinions about new testing model within the healthcare sector.

However, the survey asked respondents, to which testing center they would advise going to their friend, in case HIV testing was needed. It is interesting, though predictable, that absolutely all medical staff in the survey said, that they would recommend testing services at the healthcare facilities. Yet, preferences of the key populations were different. Their vast majority (approximately 85%) would recommend a friend referring to a non-governmental organization, and only small part would recommend also HIV testing service at the medical facilities.

WAYS TO PROVIDE PATIENTS WITH TEST RESULTS

While discussing desirable testing models, respondents note, that it is important that test results are provided promptly, so it is not necessary to repeatedly go to the testing service. In all cases, almost all respondents say that they prefer to receive test results in person, since this would make them feel safer.

However, if getting test results needs long time and it is necessary to go to the testing site again, then the respondents would like to have an alternative way of getting the result. Three possible ways were brought up during the discussion: via email, by phone or through a text message. Part of the respondents say that getting test result via email is acceptable for them.

“ Respondent: Email is acceptable for me. If results are not ready soon, and I will have to go there again, I prefer them sending me results via email.

Respondent: I also prefer via email, why should I go there and back?

At the same time, it turned out, that representatives of the key populations see some dangers connected to confidentiality breach in receiving answers via phone. Also, almost all respondents say point-blank that they would not like to receive result through a text message, because some other persons might have access to their phones and read the message.

“ Respondent: Oh, no. What if my child sees the message; or someone calls and my husband answers the call? No, I want to get my answers in person.

MECHANISM FOR PATIENTS' FEEDBACK AND RESPONSE TO IT IN THE HEALTHCARE SYSTEM

It is impossible to minimize testing barriers and improve testing uptake indicators without improving quality of HIV testing service. Hence, the survey was interested to find out, whether medical facilities have any institutional mechanisms for patients' feedback and responding to it.

Medical personnel noted that according to the order of the Minister of Healthcare, every clinic has a feedback mechanism. They described it as a patient satisfaction questionnaire, which includes topics such as provided service, waiting time, queue management, discomfort, concerns, etc.

According to the respondents, filled out questionnaires are collected in a box and then revised. Boxes are placed in visible locations in every clinic, or every patient is offered to fill out satisfaction survey questionnaire right at the entrance. However, when a moderator asks such a question, none of the participants can recall a particular case in their clinic, when administration reacted to a patient's complaint.

Direct and immediate contact with the management was listed as a second possibility of feedback provision. It should be noted that majority of the medical staff from regions declare that there is feedback mechanism in their clinics. Only one participant said that there is a feedback system and this is a complaints' journal, which has never been used by anyone. This respondent could recall only one case, when a patient contacted directly administration with some complaint and the issue was solved on that level.

SELF-TESTING, AS A POSSIBILITY TO EXPAND HIV TESTING

In 2020 Georgia made a decision to offer to the key populations possibility of HIV self-testing, which provides for comfort, privacy and excludes threat of confidentiality breach. So, the survey decided to study attitudes towards and opinions about self-testing among various populations.

It shall be noted that majority of the research participants from the key populations is informed about possibility of HIV self-testing. However, part of the respondents, mainly personnel of the primary healthcare system, was not familiar with the method of testing and moderator had to explain to them, what it implies.

Both the respondents who never heard of the self-testing before and those who did, unequivocally think that self-testing will increase HIV testing uptake. However, at the same time, the respondents speak about possible advantages and disadvantages of the self-testing.

ADVANTAGES OF HIV SELF-TESTING

Almost all respondents note that the main advantage of self-testing is possibility to adjust testing time and place to the preferences of the person who is going to get tested. Privacy and guarantee of confidentiality were listed as next positive factors.

“ *Respondent: Yes, that would facilitate and increase [HIV testing], it will be easier, you do it when you want.*

Respondent: Maybe, a person is lazy to go somewhere and get the test there, and here one knows, that he/she can go take the test and conduct it on yourself

Respondent: Yes, I know and I have used it. In the case of self-testing fear of confidentiality is gone. A person does it on his/her own and is completely alone.

DISADVANTAGES OF HIV SELF-TESTING

Respondents expressed their opinions about the challenges that will be connected with the self-testing, such as: improper use of the test; psychological shock in case of positive test result, risk of self-isolation; not referring to the confirmation testing; lack of information about the clinics where confirmation can be done.

“ *Respondent: Well, yeah, I may not conduct it properly, here a specialist does it and you have a guarantee...*”

Respondent: I think there is more risk when a person receives positive result, we do not know, how he/she would behave – hide it, become depressed, kill oneself...

Desirable ways for distribution of the self-tests: The survey was interested what are the ways of distributing HIV self-test kits among the target populations. When talking about the ways of self-test dissemination, it is noteworthy that fear of HIV-related stigma is so strong that it affects not only referrals to HIV testing, but also preferences in choosing self-test distribution modalities.

Part of the respondents highlighted that HIV self-test shall be sold at the pharmacies and supermarkets for the affordable price. However, part of the respondents living in the small towns think, that buying self-tests at the pharmacy will create the same discomfort, as buying condoms.

“ *Respondent: Oh, when I buy a condom at the pharmacy, they give you such looks, and in case of asking for a HIV test, they will go crazy.*”

Ways for distribution/receiving HIV self-tests: Respondents considered several possible ways of receiving self-test: getting or buying from vending machines; free distribution by social workers during outreach; getting from a family doctor during the visit; getting from village ambulatories; getting from a doctor during home visit; delivery by a courier (e.g. Glovo service; this is already implemented by NGO “Equality movement”).

“ *Respondent: There can be something special. Some machine. You go there and buy it. Insert money.*”

Respondent: NGOs can distribute them, or a person could go to a clinic, or when doctors make home visits, they can distribute.

In general, the respondents agree that it is preferable to have different channels of self-tests distribution, for people with different needs and preferences: “More choice, more engagement” – declares of the respondents. During the discussion part of the respondents listed also other ways of tests’ distribution: clubs, tattoo saloons, NGOs, mass events.

“ Respondent: None of the services would be bad, since there is particular category of people, who would prefer buying at the pharmacy, getting from a social worker, also, get from an organization or a clinic. Or order home delivery, because he/she is very lazy.

Returning results of HIV self-test: One of the main challenges at the initial stage of self-testing implementation is returning results and tracking possible cases of infection. Hence, the survey was interested in the respondents' attitudes towards and their expectations about entering test results into a special website. Different opinions were expressed in relation to this: part of the survey respondents thinks that people would enter their results into a registration database; part of them, despite registration on the website being anonymous, thinks that high risk behaviour groups would be afraid of registering due to lack of trust – they might think that there is possibility of individual's identification; part of the respondents believes, that people would be lazy or they would enter incorrect data. Based on this, assumption was made that validity of the registration base and data would be low.

Responses to a question „In your opinion, would people be willing to enter test results into an online registration base?“ – were distributed as follows: 3 respondents think that majority would fill in the database, 20 respondents noted that about half of the tested persons would do so; yet, 52 respondents are skeptical about this and say that very few, or just few persons would fill in the registration form. Answers were diverse:

“ Respondent: Those who are responsible and fill in the data, would do so sincerely. In other cases people would not fill the data in at all. Quite a few will be just lazy to do so.

Respondent: Here we can face another problem as well. Just like some people calling ambulance for no reason. Here we can also find people who enter data, but false, incorrect data. So, it is questionable whether information collected there will be realistic and useful for statistics.

Respondent: Fear still exists, all people are individual. Everyone has different approach and attitude towards this issue. For example, I prefer to provide information to the infectious diseases hospital, rather than enter it somewhere at the website. There are a lot of hackers, it is easy to find out IP, they can find out from where this information comes from, so, this is riskier for confidentiality.

Majority of the survey participants believe that in case of a positive HIV self-test result majority would refer to a medical facility for confirmation and treatment. Part of the respondents thinks that in case of suspicious positive result majority would not refer to medical institutions due to fear and stigma existing in the society.

CONCLUSIONS

Perceived susceptibility

Majority of high risk groups representatives makes realistic assessment of risk of being infected. However, analysis of the brief structured questionnaire demonstrates, that despite adequate risk perception, some part (about one third) of the high risk population has not been tested on HIV during the last 12 months. So, we can assume that realistic risk perception is a necessary condition for testing, yet insufficient, since testing decision is influenced by many other factors.

Perceived severity

Severity of the disease and fear of the diagnosis for majority of the research groups is connected more with the psychological and social context, rather than with health issues. Of course, fear of diagnosis plays some role in a people's decision to avoid learning their status. However, fear of diagnosis is more related to anticipated stigma, discrimination, threat of being marginalized from family, friends or society. Fear of HIV positive status is also associated with fears of losing job and decreasing employment opportunities, due to heavy social-economical consequences.

Benefits of timely testing

Majority of the respondent is well informed about potential benefits of timely HIV testing and knows, what positive results could be brought by timely diagnosis and enrollment in treatment. Along with the benefits on individual level, respondents also realize that, through learning their HIV positive status, infected persons will be able to avoid spreading infection among their family members, friends and in general, on the societal level. However, the respondents think that majority of the population does not have information on benefits of testing and effectiveness of the treatment, which, in their opinion, could be a strong motivational factor for testing.

Testing barriers

Several factors hinder high risk behaviour groups from referring to HIV testing. These factors are: insufficient awareness on HIV and HIV-related accessible services, stigma and discrimination; distrust; fear of confidentiality breach; non-friendly environment, indifferent and, sometimes, judgmental attitude of medical personnel towards risk populations and infected persons. Also, restricted geographical accessibility of testing, especially for those living in rural areas, in the regions. Besides, dire social-economic situation, which makes taking care of own health less priority. We have to assume, that all barriers listed above are so diverse and acute, that cumulatively they outweigh motivational factors (realistic perceived susceptibility, knowing potential benefits, accessibility, free treatment, etc).

Regional inequality

The research has highlighted regional inequality. On one hand, respondents talk about limited testing possibilities for people living in villages and small towns. On the other hand, they specifically mention that issues of confidentiality breach and distrust are more important for the rural population, compared to urban. They declare that in the rural area, where „everyone knows everyone“, a person does not dare to go for HIV testing. Accordingly, it is questionable that physical accessibility of testing services will solve the problem of regional inequality. It is clear that awareness and attitudes towards HIV/AIDS represent the biggest challenges in the regions.

Knowledge and attitudes of medical personnel

Despite the fact, that HIV screening is integrated into the primary healthcare system and medical personnel has certificated of the National Center for Disease Control, approaches and attitudes of HIV testing in various medical facilities differ. During in-depth interviews part of the medical staff speaks openly about insufficiency of the conducted training. Part of the participants admits that medical personnel in the primary healthcare are not ready to provide friendly services to persons with different and marginalized behaviour. All this described above demonstrates necessity of continuous medical education and underlines that along with the clinical science education of the medical personnel has to highlight more issues such as patients' rights, specifics of working with the sensitive groups, medical ethics and health-care laws.

The research has demonstrated that even in the experienced, specialized medical facilities, the respondents had some comments about HIV test result notification. When operational standards are not defined, practice related to negative and positive HIV test results notification is very different, so that a good observer would easily guess, what results the medical doctor is about to tell to the patient. Legislative gap is the reason for this problem. Georgian law on HIV/AIDS (approved in 2009), stated that by-laws had to be elaborated and approved within 6 months after passing the law. One of these by-laws had to be about test result notification. Despite elaborating the draft versions of by-laws in 2010, they were not discussed by the Ministry of Health. So, this issue is not regulated by more than 10 years and requires immediate action. In general, lack of by-laws jeopardizes service quality at medical institutions and gives ground for medical mistakes. The fact that medical staff is not informed about partner notification procedure is a good example of this gap. Partner notification was also one of the by-laws to be approved.

Inappropriate infrastructure

Infrastructure of some medical facilities (especially in the regions) is incompatible with provision of quality and friendly services. The most frequently mentioned disadvantage is non-private environment, meaning that very often patient is not alone with the provider in the testing and counseling rooms, it can happen that other people are present. This is an obstacle for establishing open and trust-based relationship. It has been specifically mentioned that pleasant design of the testing rooms would motivate people that have decided to get tested; yet, the most critical demand is cleanness of the facility and guaranteeing sanitary situation which does not diminish patients' dignity.

Testing in primary healthcare: lack of motivation among personnel

Attitudes of medical personnel of the primary healthcare system towards HIV screening is heterogenous. Despite that personnel was clearly trying to give socially desirable, i.e. "correct" answers, in some cases sincere hints on the existing challenges were given. E.g., medical staff perceives screening program as a plan to be measured by quantitative indicators. Because of this, the personnel is oriented on quantity of services, which may directly affect their quality. Sincere respondents admit also, that inclusion in the screening program has increased their workload, but their salary stayed the same. Representatives of the key populations also mentioned challenges in the primary healthcare. They declared that family doctors do not have both time and possibility to receive patient, provide counseling and hold

an open, friendly dialogue. This explains, in their opinion, that in the healthcare system testing is not accompanied neither by pre-test, nor by post-test counseling; furthermore, HIV test is often conducted without informing the patient, which is unacceptable to the respondents and does not contribute to forming trust relationship between patients and medical personnel.

Denying problems in healthcare and dysfunctional mechanisms for feedback from the patients

Medical personnel denies existence of testing barriers in the healthcare system. Statement of medical staff that “there are no barriers in the system” is noteworthy. Such denial is remarkable and it is not likely that healthcare system takes any measures to solve this problem until appropriate evidence is collected and the system acknowledges the problem. Almost all medical staff noted that, according to the order of the Ministry of Health, it is an obligation for all facilities to study patients’ satisfaction and establish mechanisms for their feedback. Part of the respondents says that they have questionnaires for studying patients’ satisfaction, or complaints’ registry, but none of them are able to recall particular case, when patient’s dissatisfaction was discussed in the clinic and followed by corresponding reaction. It is more likely that following the Minister’s order to create feedback mechanisms in the medical institutions became a formality and is either not functioning or not effective. Thus, it is logical, that personnel, who is not able (or does not) hear patients’ voices, their needs and concerns, cannot fully realize barriers existing in the healthcare system.

Civil society (community) based HIV testing model

The research has showed that non-governmental organizations and perceived as the most comfortable and friendly service providers for testing. According to the respondents, peer engagement is an efficient intervention for educating and motivating target populations for HIV testing. Besides, component of social accompanying was also mentioned, as one of the contributing factors for testing. It was revealed, that involvement of people living with HIV could also motivate HIV testing among vulnerable groups.

HIV self-testing: potential and expected challenges

Expansion of innovative self-testing approach provides for positive expectations: both medical personnel and affected groups, participating in the survey, unequivocally state that self-testing has potential to increase number of people who get tested and, consequently, improve identification of HIV cases. All target groups of the survey assess HIV self-testing possibility positively due to flexibility in terms of time and place as well as privacy. However, several different opinions were expressed related to the expected challenges (test reliability, difficulty of interpretation, lack of information about the following steps, communication of test results through a specific website, etc.). It should be mentioned, that stigma and fear spread among the general population can become a barrier not only for testing, but also for taking care of one’s health and collecting statistical data about results of the self-testing.

RECOMMENDATIONS

Recommendation 1: Training of medical personnel

It is important to train/retrain personnel of the primary healthcare centers and other clinics on the following topics: counseling skills, specifics of working with high risk behaviour groups, stigma/discrimination, data confidentiality, patients' rights, Georgian law on HIV/AIDS, etc.

Recommendation 2: Defining and institutionalizing regulations/rules based on national HIV/AIDS law

Since integrating HIV testing into the primary healthcare is actively discussed issue recently, elaboration and institutionalization of particular procedures for test result notification and partner notification (such as by-laws or standard operation procedures) by experts in the field becomes very important. Yet, the research indicates that it is also necessary to enact standard rules for test result notification in specialized clinics.

Recommendation 3: Improving testing infrastructure; ensuring privacy and comfort

It is important to improve infrastructure at medical institutions and ensure private and comfortable environment for counselor and patient.

Recommendation 4: Expansion and sustainability of community-based HIV testing model

Active involvement of NGOs in HIV prevention services and sustainability of their functioning is an important condition for expanding testing services. Expansion and sustainability of social accompanying and peer-to-peer approaches shall be one of the priorities. Successful experience of people living with HIV can be used for increasing HIV testing motivation.

Recommendation 5: Expanding self-testing, as an alternative way of testing coverage

It is recommended to offer alternative ways of HIV self-tests provision to the high risk behavior groups some. This will increase coverage and reduce expenditures. In order to promote self-testing service and make it more efficient, it is necessary to elaborate operational manual of self-testing service provision, which would include (but not be limited to) the following topics: detailed instruction of testing procedure (it is possible to create a video instruction); interpretation of test results; stages following the test results; possibilities of confirmation testing and locations of relevant laboratories; an informational webportal – “Frequently asked questions”, where after conducting a self-test anyone could find answers to critically important questions; in case when immediate support is needed – number of a hot line or other contact information. The manual shall also define alternative ways of self-test kits dissemination among target groups, among others – through vending (sigma) machines. It is desirable to create particular motivational mechanisms for persons who were tested so that they are incentivized to register their test and test result in a database.

Recommendation 6: Conducting patients' satisfaction survey and institutionalization of effective feedback mechanisms

It is important to create/improve quality control mechanisms and contribute to their enacting in the healthcare system. Particular attention shall be paid to receiving real feedback from the patients; analysis of the issues identified by the patients and adequate and timely reaction to the feedback. In order to increased effectiveness of the feedback mechanisms and motivating patients, it is desirable that medical facility defines, what kind of accountability it has to the patients and how it would communicate back with the patients regarding particular cases.

Recommendation 7: Developing and planning HIV testing barriers' reduction strategy for rural population

It is important to pay more attention to rural population. It is desirable to study situation in the regions and develop a strategy for HIV/AIDS awareness raising, decreasing stigma and discrimination and increasing referrals to services based on the local needs and specifics.

Recommendation 8: Conducting informational campaigns

It is desirable to carry out informational campaigns for forming attitudes towards HIV and decreasing stigma among general population. While providing information, specific focus shall be made on potential benefits of timely testing and treatment, which are perceived as motivational factors for testing. Also, it is recommended to support massive testing on HIV and organizing various actions from time to time in order to involve particular groups in HIV testing.

Recommendation 9: Focusing provider-initiated testing in the primary healthcare on targeted testing

It is important to target HIV testing initiated at the primary healthcare level on particular groups, hence contributing to effectiveness and efficiency of the services provided.

Recommendation 10: Studying scale of stigma and discrimination in the healthcare system

Since stigma and discrimination are one of the main barriers for testing, it is necessary to conduct quantitative research of their scale in the healthcare system. As an example, it is recommended to conduct "Stigma index" research, already conducted and approved in many countries. Data of such a research would help healthcare officials and policy makers in planning targeted interventions contributing to creation of stigma-free environment in medical facilities. Besides, stigma index study will provide baseline data for measuring progress in fighting stigma in the future.

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Annex 1. Study instruments

Date: _____
Code: ____/____/____/____/____

Interview Guide - Key Affected Populations

Section 1: Perceived susceptibility

1.1 Thank you very much for completing the brief questionnaire. You have already answered the question on how you assess your risk of becoming HIV infected. Please let us know, which factors do you base your assessment on? What is the reason for you assessing your risk like that?

(To the interviewer: If the respondents do not provide information easily, you can try third-party technique. Just ask: when do you think the person in general may have increased risk for acquiring HIV?)

Section 2: Perceived severity

2.1 How dangerous do you consider HIV to be? Why do you think so? Please explain.

2.2 How relevantly (how realistically) does the public perceive severity of HIV? How adequate seems public fear of disease or infected individuals (i.e. Does it have any exaggerated fear of the disease or of the people infected)? Why do you think so?

(To the interviewer: If the dialogue does not unfold, go in-depth)

- How dangerous for the human health do you think this infection may be?
- Is this infection curable?

Section 3: Perceived benefits

3.1 In your opinion, why is it necessary to get tested on HIV and know your own HIV status?

(To the interviewer: Some respondents may talk about barriers in this section. Do not interrupt. Allow them to express their opinion, even though there is a separate section on barriers next to come. If you consider the topic is not exhausted yet, or you have not heard opinion of some respondents, then when you go to the barriers section, focus on those who have refrained from sharing their opinion so far.)

3.2 In your opinion, how beneficial is early detection, i.e. when a person learns as early as possible if he/she has HIV?

3.3 You were speaking about benefits of HIV testing; could you tell us, for whom testing brings benefits? For the person, who gets tested or for other people, connected to him/her? Please, tell us, why do you think so.

(To the interviewer: We also wanted to understand, how at-risk groups perceive the benefits of testing not only at individual level, but for the healthcare system and economy as well. However, we have decided not to overload them with difficult questions and, therefore, did not envisage specific questions related to this. Nevertheless, if this topic raises up, allow them to elaborate.)

Section 4: Perceived barriers

4.1 In your opinion, what is the most important barrier which hinders people from getting tested on HIV?

(To the interviewer: Topics for exploration)

- In your opinion, how adequate perception (realistic assessment) of the risk of being infected influences person's decision to get tested on HIV?
- In your opinion, to which extent low public awareness can be a barrier to testing? Why do you think so?
- In your opinion, if the person knows the benefits of HIV testing, will it encourage him to get tested? Please explain why do you think so?
- In your opinion, how fear of a positive result (i.e. that a person would turn out to be HIV positive) influences person's decision about HIV testing?
- What role does confidentiality play in testing decision?
- In your opinion, what role does the fear of stigma, isolation and marginalization (from family or community) play in decision making?
- (To the interviewer: If an issue of geographical accessibility has not been touched during discussion/interview, explore.) – What do you think about geographical accessibility in relation to HIV testing?
- (To the interviewer: Although financial barriers are less expected, check it out nevertheless) – What would you say about financial barriers?

Barriers specific to the health care system

4.2 We talked about barriers emerging at individual, personal level, as well as about various social barriers. Now we are interested in your assessment of the barriers inside the healthcare system. To which extent do you think medical institutions are ready to offer user-friendly and high quality testing and counseling services to the persons under the risk?

4.3 What places do you know where HIV testing is available?

4.4 Let us imagine HIV testing services in medical institutions, clinics. How would you describe the personnel, employees of the medical institution, who conduct HIV testing and counseling? What would typical portrait of such personnel look like?

4.5 How would you describe testing barriers in medical facilities, if you could think of some?

4.6 HIV testing services in primary healthcare units (i.e., polyclinics, women's consultations) are limited so far. We would like to ask you, anyway, do you have any experience with HIV testing in polyclinics or women's consultations? Please share.

4.7 You mentioned HIV testing is usually offered by non-governmental organizations. How would you describe testing barriers in non-governmental organizations, if you could think of some?

Section 5: Motivators (Cues to action)

5.1 You already answered in the brief questionnaire, whether you have been tested on HIV-both ever and during the last 12 months. Now we are interested in your experience related to the testing.

(To the interviewer: If you hold an individual interview, ask the question whether the respondent has ever been tested for HIV; if it is FGD, ask the following)

5.2 Let's divide experience into two parts: Let's listen first to those, who had been tested. Please, recall stages you have passed during decision making. What helped you to make a decision?

5.3 How would you describe your experience after getting tested?

5.4 Now ask those who have never been tested. Please tell us, what was the hindering factor? What became the impediment to not taking the test?

5.5 In your opinion, would it make easier for someone to refer to HIV testing, if a social worker accompanies him/her?

5.6 Whom would you ask to accompany you to the testing place - a friend, a partner, a family member, or someone else? Why would you ask this person?

5.7 Thank you so much for sharing your experience. Now we are interested in your opinion, which may come from your own story, or be related to the experiences of your acquaintances. Do you think if a person learns that he/she is not infected, this may lead him/her to live a safer lifestyle? For instance, have you heard from anyone regarding changing the attitudes towards condom use? Or, becoming more cautious while using drugs?

5.8 There are some studies indicating that sometimes a sad or tragic story of another person, either someone we know or a stranger, pushes people to overcome existing barriers and get tested for HIV? Please, describe such stories briefly, if you remember any.

5.9 It is also highlighted that people do more testing when they start relationships with a new sexual partner. Please let us know if you have heard of such stories.

5.10 It is also known that some people agree more easily to HIV testing if the service is offered spontaneously - for instance, during mass campaigns, rallies. Such events are often held in Georgia as well - on the first of December, or in May. In your opinion, is it possible that more people gets involved into HIV testing at mass events and rallies? Please recall particular stories if you have heard of any.

5.11 Imagine you refer to the polyclinic (or women's consultation) (To the interviewer: Mention if your respondents are females) and it is possible to get tested for HIV there. What would be your preferred testing procedure?

(To the interviewer: Allow them to describe the service. If necessary, look deeper for the following)

- Who should carry out the testing? (Tip to the interviewer: family doctor, nurse, laboratory worker, or specially assigned employee?)
- Under what conditions should testing be done?(Tip to the interviewer: If besides the doctor there is someone in the office, investigate this situation as well)
- In addition to testing, should the counseling be offered?
- How to get the test result - by phone, on-site, immediately, via text message, etc.?
- Does it matter if the counselor is a woman or a man?

5.12 If you were asked by your friend or acquaintance, where would you recommend HIV testing and why?

Section 6: Self-testing - an opportunity to increase HIV testing

(To the interviewer: In this section, we are interested in the respondent's opinions regarding self-testing for HIV. Before you begin, ask if they understand what self-testing means. It is preferable to indicate in the transcript, how many of them understood the meaning of the self-test. Allow, if anyone wants to explain. Provide with your explanation, as indicated: the self-test for HIV is given to the person in need who can test himself at home or anywhere he/she wants; thus, he/she does not need to go to the medical facility or non-governmental organization for testing. Self-test can use saliva sample, as well as the drop of blood. Self-testing means the test result is self-interpreted, according to the instructions. To simplify understanding, explain that this test works with the same principle as, for instance, the pregnancy test. Then continue discussion or the interview)

6.1 In your opinion, how much would self-testing on HIV increase testing motivation and simplify the decision-making process? Please explain, why do you think so?

6.2 In your opinion, which model of HIV self-test provision would be more convenient and attractive to the persons interested? If you consider some people reluctant to come for testing to a specialized clinic or a non-governmental organization, then, in your opinion, in what ways, from where it is better for those persons to receive the self-test?

(To the interviewer: If not listed by the respondent, investigate the following alternatives)

- Buy at the pharmacy?
- Receive free of charge from the AIDS Center
- Receive free of charge from an NGO
- Receive through home delivery service (e.g. Glovo)
- or receive from a dispenser where contact with people is not required at all. For instance, from something like a soft drinks vending machine?

6.3 In your opinion, if the self-tests become accessible, how high demand for those would be among the high-risk populations? Or among young people who otherwise do not want to go to the services? Please explain.

6.4 We are interested to know the general statistics of how many self-tests were taken and how many of them turned out positive. Besides, we want to make sure that if positive, the tested person will not be missing from the programs on HIV/AIDS treatment and care. Thus, we want you to specify the following: in your opinion, if the person takes HIV self-test and the test result is positive, how likely is that he/she would visit HIV/AIDS services on their own (self-driven) to verify/confirm the diagnosis? Please explain.

6.5 There is also an idea to create a special website where people will be able to enter the self-test results (positive, or negative, or uncertain); besides, the data will remain anonymous - the website will not require first and last name registration. How sincerely and thoroughly do you think the self-test results will be registered?

To the interviewer: In the beginning of the discussion/interview you already explained to participants, that on the second page of the short questionnaire there was one question to be answered at the end of the meeting. Remind them now to check the second page of the questionnaire; read the question on self-testing and ask them to mark one response, which better reflects their opinion.

To the interviewer: If time allows, ask participants, whether they want to add something, or give feedback. After that thank them and say good bye.

Date: _____
Code: __/__/__/_/___

Individual Interview - People Living with HIV

Thank you very much for participating in our survey. Your opinion is especially important to us and highly appreciated.

You are probably much better informed about HIV, so along with your personal experience, we would like to get your opinion about awareness of the general population and/or the high risk groups, with particular focus on motivation and barriers to HIV testing. Therefore, our interview will involve questions about your personal experiences as well as your perceptions and opinions regarding the other people around.

During the interview we will ask you to recall the real stories. Please note that you have the right to skip any question. However, we would like to assure you the anonymity of any information shared by the respondent is protected, including the survey report preparation. Furthermore, if the story you share is unique due to its specificity and there is the threat that any particular person (or history) can be identified, please inform us. In such case, we will listen to you to obtain more comprehensive picture of the research topic, however the report will not include this story.

After completing the interview, we also will ask you to complete the self-administered questionnaire, where only 3 questions are given.

If you do not have additional questions regarding the interview, we can get started.

Section 1: Perceived susceptibility

1.1 Please tell us, how you assessed your risk of becoming HIV infected before being tested and learning your status?

1.2 Did your risk assessment change after you learned on your status? Please describe, what has changed.

1.3 In general, what role do you think correct risk assessment of becoming infected plays in any person's decision to get tested for HIV?

Section 2: Perceived severity

2.1 How dangerous did you consider HIV infection to be before you learned the diagnosis, and did you change your attitude afterwards? Please explain.

2.2 There is common opinion that severity of the disease may somehow affect the person's decision about testing. In your opinion, how realistic is public awareness regarding HIV infection severity? Does it have any exaggerated fear of the disease or of the people infected? Why do you think so?

2.3 Do you think this infection is more severe for the person in social context than in terms of health?

Section 3: Perceived benefits

3.1 At this point, you most probably think that HIV testing is necessary and people should be aware of their HIV status? Is your position different before or now and please explain, how it was then and what is your attitude towards the benefits of testing now?

3.2 In your opinion, did you manage to get diagnosis timely, and why is it so important for any person to get his/her status in the timely manner?

3.3 Could you please state it separately - for whom and why is it helpful to learn HIV status at an early stage? On personal level - why is the early diagnosis so important? What are the benefits of early diagnosis for the others, or for the people close to the infected?

3.4 In your opinion, how can timely HIV testing affect the country's healthcare system? What benefits can testing bring to the healthcare system?

3.5 In your opinion, how can HIV testing affect the country's economy? (For the reference - the healthy and able-bodied population as one of the factors of economic development).

Section 4: Perceived barriers

4.1 In your opinion, what is the most important barrier that prevents people from getting tested for HIV? If you would like, tell us about your own experience. If you prefer not telling your story, would you share experience of others?

(To the interviewer: It is better to let the respondent speak on his/her own, without any prompting. If it seems difficult, go in-depth).

- In your opinion, how adequate perception (realistic assessment) of the risk of being infected influences person's decision to get tested on HIV?
- In your opinion, to which extent low public awareness can be a barrier to testing? Why do you think so?
- In your opinion, if the person knows the benefits of HIV testing, will it encourage him to get tested? Please explain why do you think so?
- In your opinion, how fear of a positive result (i.e. that a person would turn out to be HIV positive) influences person's decision about HIV testing?
- What role does confidentiality play in testing decisions?
- In your opinion, what role does the fear of stigma, isolation and marginalization (from family or community) play in decision making?

- **(To the interviewer:** Dig deeper, if during discussion/an interview geographical access has not been mentioned) - How would you describe the geographical accessibility of HIV testing?
- **(To the interviewer:** Although financial barriers are less expected, check it out nevertheless) - What would you say regarding financial barriers?

Barriers specific to the healthcare system

4.2 Let's imagine the usual situation when the personnel notifies HIV positive status to the person. What would typical portrait of such personnel look like? We do not ask you to necessarily recall your own story. We want to get your insight regarding medical personnel telling diagnosis to an HIV positive person.

4.3 We talked about barriers emerging at individual, personal level, as well as about various social barriers. Now we are interested in your assessment of the barriers inside the healthcare system. To which extent do you think medical institutions are ready to offer user-friendly and high quality testing and counseling services to the persons under the risk?

4.4 Let us imagine HIV testing services in medical institutions, clinics. How would you describe barriers to testing in the medical facilities, if you could think of some?

4.5 HIV testing services in primary healthcare units (i.e., polyclinics, women's consultations) are limited so far. We would like to ask you, anyway, do you have any experience with HIV testing in polyclinics or women's consultations? Please share.

4.6 How would you describe barriers for testing in NGOs, if any?

(To the interviewer: Pay attention to the barriers to testing so that the interview does not go in another direction. For instance, they may generally talk about HIV-related stigma in medical facilities; when people coming to the medical facility and seeking treatment experience degrading attitude, or stigmatizing environment because of their positive status. These issues go beyond the scope of our survey. However, be sensitive not to leave the respondent with impression that we are not interested in his/her personal emotions and only care about the research.)

4.7 It is very interesting to hear from you how ethical the personnel was when informing you about your HIV positive status. How would you describe the post-test counselling? If you do not like to talk about your personal experience, tell us any story that you know of.

(To the interviewer: If the respondent does not mention what type of institution he/she is talking about, tell not to name particular institution; just explain that you would like to know the type of facility - was it a medical facility or a non-governmental organization.)

4.8 HIV testing services in primary healthcare units (i.e., polyclinics, women's consultations) are limited so far. We would like to ask you, anyway, do you have any experience with HIV testing in polyclinics/family clinics or women's consultations? Please share.

Section 5: Motivators (Cues to action)

5.1 We are interested to hear from you your own, or the other people's experience, if any, about which stages does a person go through before making the decision to get tested for HIV? How hard or long is this process and what factors contribute to the decision and its fulfillment?

5.2 In your opinion, would accompaniment of a social worker facilitate for a person referring to HIV testing?

5.3 Since we speak about accompanying persons, in your opinion, who would be an important accompanying person for people (a friend, partner, a family member, or someone else)?

5.4 Now we are interested in your opinion, which may come from your own story, or be related to the experiences of your acquaintances. Do you think if a person learns that he/she is not infected, this may lead him/her to live a safer lifestyle? For instance, have you heard from anyone regarding changing the attitudes towards condom use? Or, becoming more cautious while using drugs?

5.5 There are some studies indicating that sometimes a sad or tragic story of another person, either someone we know or a stranger, pushes people to overcome existing barriers and get tested for HIV? Please, describe such stories briefly, if you remember any.

5.6 It is also highlighted that people do more testing when they start relationships with a new sexual partner. Please let us know if you have heard of such stories.

5.7 It is also known that some people agree more easily to HIV testing if the service is offered spontaneously - for instance, during mass campaigns, rallies. Such events are often held in Georgia as well - on the first of December, or in May. In your opinion, is it possible that more people gets involved into HIV testing at mass events and rallies? Please recall particular stories if you have heard of any.

5.8 There are talks in Georgia that family doctors should offer testing on HIV and hepatitis to every patient who comes to the clinic. If this decision was implemented in the future, what type of testing service would you welcome in the primary healthcare settings? What would be your preferred testing procedure?

(To the interviewer: Allow them to describe the service. If necessary, look deeper for the following)

- Who should carry out the testing? (Tip to the interviewer: family doctor, nurse, laboratory worker, or specially assigned employee?)
- In your opinion, should the family doctor conduct brief counselling on HIV, and how acceptable would it be for the patients to get counselling from the family doctor?

(Tip to the interviewer: if the point does not pop up, investigate: the family doctor is almost never alone, having assistant present in the office. What impact might this fact have on the process of counseling?)

➤ Does it matter if the counselor is woman, or man? Why do you think so?

5.9 If you were asked by your friend or acquaintance, where would you recommend HIV testing and why?

Section 6: Self-testing - an opportunity to increase HIV testing

(To the interviewer: In this section, we are interested in the respondent's opinions regarding self-testing for HIV. Before you begin, ask if they understand what self-testing means. It is preferable to indicate in the transcript, how many of them understood the meaning of the self-test. Allow, if anyone wants to explain. Provide with your explanation, as indicated: the self-test for HIV is given to the person in need who can test himself at home or anywhere he/she wants; thus, he/she does not need to go to the medical facility or non-governmental organization for testing. Self-test can use saliva sample, as well as the drop of blood. Self-testing means the test result is self-interpreted, according to the instructions. To simplify understanding, explain that this test works with the same principle as, for instance, the pregnancy test. Then continue discussion or the interview)

6.1 In your opinion, how much would self-testing on HIV increase testing motivation and simplify the decision-making process? Please explain, why do you think so?

6.2 In your opinion, which model of HIV self-test provision would be more convenient and attractive to the persons interested? If you consider some people reluctant to come for testing to a specialized clinic or a non-governmental organization, then, in your opinion, in what ways, from where it is better for those persons to receive the self-test?

(To the interviewer: If not listed by the respondent, investigate the following alternatives)

➤ Buy at the pharmacy?

➤ Receive free of charge from the AIDS Center

➤ Receive free of charge from an NGO

➤ Receive through home delivery service (e.g. Glovo)

➤ or receive from a dispenser where contact with people is not required at all. For instance, from something like a soft drinks vending machine?

6.3 In your opinion, if the self-tests become accessible, how high demand for those would be among the high-risk populations? Or among young people who otherwise do not want to go to the services? Please explain.

6.4 We are interested to know the general statistics of how many self-tests were taken and how many of them turned out positive. Besides, we want to make sure that if positive, the tested person will not be missing from the programs on HIV/AIDS treatment and care. Thus, we want you to specify the following: in your opinion, if the person takes HIV self-test and the test result is positive, how likely is that he/she would visit HIV/AIDS services on their own (self-driven) to verify/confirm the diagnosis? Please explain.

6.5 There is also an idea to create a special website where people will be able to enter the self-test results (positive, or negative, or uncertain); besides, the data will remain anonymous - the website will not require first and last name registration. How sincerely and thoroughly do you think the self-test results will be registered?

To the interviewer: In the beginning of interview you have already explained to the respondents that they will be kindly asked to fill out short questionnaire. Give them the questionnaire now and ask to respond to three questions.

To the interviewer: If time allows, ask participants, whether they want to add something, or give feedback. After that thank them and say good bye.

Interview Guide - Healthcare Worker survey

Section 1: Perceived susceptibility

1.1 Thank you very much for completing the brief questionnaire. You have already answered the question on how you assess your risk of becoming HIV infected. Please let us know, which factors do you base your assessment on?

1.2 In general, as a healthcare worker, how do you think who can become HIV infected? Or who do you think should be tested for HIV?

(**To the interviewer:** Hereby, stereotypes of the medical personnel can be revealed)

1.3 Let's imagine I know nothing about HIV positive people. How would you describe the portrait of a typical HIV-positive person? Imagine you are a director of a motion picture about an HIV positive person. What would your character look like?

- Who would be your character?
- Would your character be a woman or a man?
- Educated or not?
- What profession would he/she have?
- Of what age?
- Urban resident, or from countryside?
- Is he/she modern or old-fashioned?
- What is his/her manner of speaking?
- One very important detail/peculiarity of your character that you should definitely emphasize.

Section 2: Perceived severity

2.1 How dangerous do you consider HIV to be? And why do you think so?

2.2 How relevantly (how realistically) does the public perceive severity of HIV? How adequate seems public fear of disease or infected individuals (i.e. Does it have any exaggerated fear of the disease or of the people infected)?

2.3 In your opinion, how well-informed doctors from primary health care are in general, and in particular at your facility about HIV prevention or treatment?

Section 3: Perceived benefits

3.1 In your opinion, why is it necessary to get tested on HIV and know your own HIV status?

(To the interviewer: If someone claims that knowledge of status is not necessary, find out why they think so. Some respondents may talk about barriers in this section. Do not interrupt. Allow them to express their opinion, even though there is a separate section on barriers next to come. If you consider the topic is not exhausted yet, or you have not heard opinion of some respondents, then when you go to the barriers section, focus on those who have refrained from sharing their opinion so far.)

3.2 In your opinion, how beneficial is early detection?

3.3 You were speaking about benefits of HIV testing; could you tell us, for whom testing brings benefits? For the person, who gets tested or for other people, connected to him/her? Please, tell us, why do you think so.

3.4 In your opinion, what influence timely HIV testing could have on the country's healthcare system? What type of benefit could testing bring for the healthcare system?

To the interviewer: It is possible that someone thinks, that expansion of testing would affect healthcare system negatively; allow them to express their opinion)

3.5 In your opinion, what influence could HIV testing have on the country's economy?

(Note for the interviewer – healthy and able-bodied population, as one of the factors for economic development; it is possible, that opposite opinions are expressed as well – that infected persons are a burden for economy; or that the state spends big financial resources on them. Ask such participants to elaborate more, if such opinions arouse. We are interested in studying such attitudes of medical personnel).

Section 4: Perceived barriers

4.1 In your opinion, what are those important barriers which hinder people from getting tested on HIV?

Topics for exploration

- In your opinion, how adequate perception (realistic assessment) of the risk of being infected influences person's decision to get tested on HIV?
- In your opinion, to which extent low public awareness can be a barrier to testing? Why do you think so?

- In your opinion, if the person knows the benefits of HIV testing, will it encourage him to get tested? Please explain why do you think so?
- In your opinion, how fear of a positive result (i.e. that a person would turn out to be HIV positive) influences person's decision about HIV testing?
- How guarantees of keeping confidentiality affect a decision to get tested on HIV?
- In your opinion, what role does the fear of stigma, isolation and marginalization (from family or community) play in decision making?
- **(To the interviewer:** If an issue of geographical accessibility has not been touched during discussion/interview, explore.) – What do you think about geographical accessibility in relation to HIV testing?
- **(To the interviewer:** Although financial barriers are less expected, check it out nevertheless) – What would you say about financial barriers?

Healthcare system-specific barriers

4.2 We talked about barriers on individual, personal level, also, we touched upon different social barriers. Now, we are interested, how would you assess barriers in healthcare system. Please, list, what places do you know about, that provide HIV testing?

4.3 In your opinion, how ready medical facilities are to offer friendly and high quality testing and counseling services to people under risk?

4.4 How would you describe testing barriers in medical facilities, if you could think of some?

4.5 How would you describe testing barriers in non-governmental organizations, if you could think of some?

4.6 Please, tell us, does your clinic provide HIV testing? If yes, in your opinion, is this services stigma-free? Free from barriers? Please, elaborate.

4.7 If testing is not conducted, please, tell us, in your opinion, why HIV testing is not conducted at your clinic?

(To the interviewer: Pay attention, whether participants think that HIV testing shall be conducted only in specialized clinics and/or in non-governmental organizations.)

4.8 In general, in your opinion, shall HIV testing be offered in primary healthcare? Please, explain, why do you think so.

4.9 In your opinion, how ready is your clinic/medical facility to offer friendly and high quality testing and counseling to high risk persons? Why do you think so?

(To the interviewer: We expect that medical personnel shall know, who is considered as high risk populations in regards to HIV infection; if it turns out that the respondents do not know this, explain, that in Georgia risk populations are as follows: people who use drugs, MSM, sex worker women, prisoners.)

4.10 Could you recall, during the last two years, a case at your clinic, when someone was diagnosed with HIV infection, or a HIV positive person referred for treatment?

(To the interviewer: Let them speak, if the answer is yes, ask, was that their patient or not? If the respondent says it was not his/her patient, ask, how did he/she learn about HIV status of a patient?)

4.11 How would you describe attitudes of medical staff in primary healthcare towards risk populations? And towards people living with HIV?

4.12 You spoke about attitudes of medical staff overall in the primary healthcare. Is this description relevant to the attitude of medical staff at your clinic? If it is different, please, explain, what this difference is and what lies beneath this difference.

4.13 In your opinion, if medical staff at your clinic learns that a patient is HIV infected, would the personnel take additional (unusual) safety measures during examination or procedures? In your opinion, why such measures would be taken?

(To the interviewer: Do not prompt; if necessary, ask –e.g., would put on gloves, a mask, or use special, different instruments, or would not receive a patient and refer him/her to another provider.)

4.14 In your opinion, is there a reason for medical personnel to worry when receiving a HIV infected patient?

(To the interviewer: Do not prompt, if necessary, ask – e.g. How fear of infection could be explained in medical personnel? Or, threat of infecting other patients – justification, often brought up by medical doctors; or ask, is a reason to worry the fact, that universal safety measures might not be adhered to in family clinics?)

4.15 In your opinion, how satisfactory is medical personnel's awareness on HIV infection in the primary healthcare?

(To the interviewer: Ask, could they recall any formal or informal educational course on HIV/AIDS, that they had attended; how necessary do they consider such education and why?)

4.16 In your opinion, if a doctor receives a HIV positive patient, with whom he/she shall share patient's status?

(To the interviewer: Ask separately – would he/she share with other personnel? Or with patient's family members? Or would he/she share with other persons?)

4.17 In your opinion, shall family doctors offer HIV testing to the patients visiting clinics and why?

(To the interviewer: Ask – Shall this offer imply referring for testing to other institutions or HIV testing shall be provided on site, at the primary healthcare level? Ask to explain, why do they think so (why this could be good or bad)?

4.18 Recall, please, in your clinic – is there any institutional mechanism (e.g. a department, or quality control staff, or complaints' box), through which a patient can provide feedback to the clinic administration (e.g. if confidentiality was violated, or in case a doctor's attitude was unethical)? If such mechanism exists, please, describe, how it works.

4.19 Is information about existence of such a mechanism accessible for the patients? Do patients know about it or have they used this mechanism?

(To the interviewer: Ask, whether information about this is placed in patients' sight.)

4.20 At your clinic, or a clinic that you know, could you recall a particular case during the last two years, when a complaint from a patient was followed by a reaction from management/administration? Please, tell us about such a case.

4.21 In your opinion, if a patient with different behavior, or different outfit, comes to the primary healthcare clinic, what would attitude of medical personnel towards this person be?

4.22 You personally, how would you describe such people, or in general high risk groups?

(To the interviewer: If necessary, list again high risk groups – MSM, PUD, trans persons, sex workers. It might happen that someone accidentally says, that they are demanding; they have complexes and healthcare personnel treats them well, but they themselves are doubtful and hence always discontent, etc. If such opinions arise, elaborate.)

Section 5: Cues to action (motivators)

You already answered in the brief questionnaire, whether you have been tested on HIV- both ever and during the last 12 months. Now we are interested in your experience related to the testing.

5.1 (During the FGDs) Let's divide experience into two parts: Let's listen first to those, who had been tested. Please, recall stages you have passed during decision making. What helped you to make a decision?

5.2 How would you describe your experience after getting tested?

5.3 In your opinion, would it make easier for someone to refer to HIV testing, if a social worker, say, from an NGO, accompanies him/her?

5.4 Since we are talking about accompanying persons, in your opinion, who could be for people a significant other, with whom they would go for testing (friend, partner, family member, etc)?

5.5 Thanks for sharing your experience. Now we are interested in your opinion, which may come from your own story, or be related to the experiences of your acquaintances. Do you think if a person learns that he/she is not infected, this may lead him/her to live a safer lifestyle? For instance, have you heard from anyone regarding changing the attitudes towards condom use? Or, becoming more cautious while using drugs?

5.6 There are some studies indicating that sometimes a sad or tragic story of another person, either someone we know or a stranger, pushes people to overcome existing barriers and get tested for HIV? Please, describe such stories briefly, if you remember any.

5.7 It is also highlighted that people do more testing when they start relationships with a new sexual partner. Please let us know if you have heard of such stories.

5.8 It is also known that some people agree more easily to HIV testing if the service is offered spontaneously - for instance, during mass campaigns, rallies. Such events are often held in Georgia as well - on the first of December, or in May. In your opinion, is it possible that more people gets involved into HIV testing at mass events and rallies? Please recall particular stories if you have heard of any.

5.9 We touched upon this issue earlier - about HIV testing in the primary healthcare system. There are talks in Georgia that family doctors should offer testing on HIV and hepatitis to every patient who comes to the clinic. If this decision was implemented in the future, what type of testing service would you welcome in the primary healthcare settings? Could you describe?

(**To the interviewer:** Give possibility to describe such service. If necessary, ask the following questions))

- Who should carry out the testing? (**Tip to the interviewer:** family doctor, nurse, laboratory worker, or specially assigned employee?)
- In your opinion, should the family doctor conduct brief counselling on HIV, and how acceptable would it be for the patients to get counselling from the family doctor?

(**Tip to the interviewer:** if the point does not pop up, investigate: the family doctor is almost never alone, having assistant present in the office. What impact might this fact have on the process of counseling?)

- Does it matter if the counselor is woman, or man? Why do you think so?

5.10 In your opinion, what interventions should the ministry plan to make testing services in the primary healthcare attractive for the people visiting clinics?

5.11 If you were asked by your friend or acquaintance, where would you recommend HIV testing and why?

Section 6: Self-testing - an opportunity to increase HIV testing

(**To the interviewer:** In this section, we are interested in the respondent's opinions regarding self-testing for HIV. Before you begin, ask if they understand what self-testing means. It is preferable to indicate in the transcript, how many of them understood the meaning of the self-test. Allow, if anyone wants to explain. Provide with your explanation, as indicated: the self-test for HIV is given to the person in need who can test himself at home or anywhere he/she wants; thus, he/she does not need to go to the medical facility or non-governmental organization for testing. Self-test can use saliva sample, as well as the drop of blood. Self-testing means the test result is self-interpreted, according to the instructions. To simplify understanding, explain that this test works with the same principle as, for instance, the pregnancy test. Then continue discussion or the interview)

6.1 In your opinion, how much would self-testing on HIV increase testing motivation and simplify the decision-making process? Please explain, why do you think so?

6.2 In your opinion, which model of HIV self-test provision would be more convenient and attractive to the persons interested? If you consider some people reluctant to come for testing to a specialized clinic or a non-governmental organization, then, in your opinion, in what ways, from where it is better for those persons to receive the self-test?

(To the interviewer: If not listed by the respondent, investigate the following alternatives)

- Buy at the pharmacy?
- Receive free of charge from the AIDS Center
- Receive free of charge from an NGO
- Receive through home delivery service (e.g. Glovo)
- or receive from a dispenser where contact with people is not required at all. For instance, from something like a soft drinks vending machine?

6.3 In your opinion, if the self-tests become accessible, how high demand for those would be among the high-risk populations? Or among young people who otherwise do not want to go to the services? Please explain.

6.4 We are interested to know the general statistics of how many self-tests were taken and how many of them turned out positive. Besides, we want to make sure that if positive, the tested person will not be missing from the programs on HIV/AIDS treatment and care. Thus, we want you to specify the following: in your opinion, if the person takes HIV self-test and the test result is positive, how likely is that he/she would visit HIV/AIDS services on their own (self-driven) to verify/confirm the diagnosis? Please explain.

6.5 There is also an idea to create a special website where people will be able to enter the self-test results (positive, or negative, or uncertain); besides, the data will remain anonymous - the website will not require first and last name registration. How sincerely and thoroughly do you think the self-test results will be registered?

To the interviewer: In the beginning of the discussion/interview you already explained to participants, that on the second page of the short questionnaire there was one question to be answered at the end of the meeting. Remind them now to check the second page of the questionnaire; read the question on self-testing and ask them to mark one response, which better reflects their opinion.

If time allows, ask participants, whether they want to add something, or give feedback. After that thank them and say good bye.

There is also an idea to create a special website where people will be able to enter the self-test results (positive, or negative, or uncertain); besides, the data will remain anonymous - the website will not require first and last name registration. How sincerely and thoroughly do you think the self-test results will be registered?

