

# The HIV Treatment Cascade for MSM in the Countries of Eastern Europe and Central Asia

**Review of the Results of National Studies** 

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### List of Abbreviations

- AIDS Acquired immune deficiency syndrome
- ARV therapy antiretroviral therapy
- CD4 Cluster of differentiation 4
- EECA Eastern Europe and Central Asia
- HIV Human immunodeficiency virus
- IBBS Integrated bio-behavioral survey
- LGBT Lesbian, gay, bisexual, and trans\* people
- MSM Men who have sex with men
- NGO Non-governmental organization
- PLH People living with HIV
- UNAIDS Joint United Nations Programme on HIV/AIDS
- WHO World Health Organization



#### Brief Summary

The HIV treatment cascade for men who have sex with men (MSM) makes it possible to evaluate the effectiveness of national measures aimed at combating the HIV epidemic, and clearly shows the coverage and quality of individual HIV prevention and treatment services using the ratio between those who need services and those who have had positive targeted outcomes as a result of receiving those services. The cascade clearly demonstrates where gaps are concentrated in the system for the provision of HIV services, and where progress has been made in meeting the global "90-90-90" targets, which are aimed at fighting the HIV epidemic.

The countries of the region of Eastern Europe and Central Asia (EECA) are characterized by gaps in the quality, completeness, reliability, and newness of data on HIV among MSM. Only some countries of the region have developed a cascade of services for MSM. In addition to the countries of the regional program "Right to Health" (Armenia, Belarus, Georgia, Kyrgyzstan, and Macedonia), published cascades of HIV services for MSM were available in the Russian Federation, Ukraine, Tajikistan, and Kazakhstan. However, the most reliable and up-to-date data was that used to develop a cascade of services for MSM in Ukraine. Meanwhile, the data used in the cascade of the Russian Federation is outdated, as is the data from Tajikistan and Kazakhstan, which, moreover, are of low quality.

In the Russian Federation, which accounts for the majority of new HIV cases in the EECA region, the greatest lag in the "90-90-90" targets occurs at the HIV testing stage (HIV diagnosis): 77% of HIV-positive MSM are not aware of their HIV status (2015 data). The situation is similar in Tajikistan, where only 19% of the estimated number of HIV-positive MSM know their HIV status. In Ukraine, the largest gap also occurs in the first stage of the cascade: only 59% of the number of HIV-positive MSM are observed at the testing stage and at the initiation of treatment: only 35% of the estimated number of HIV-positive MSM were aware of their HIV status, and of those who knew they are HIV-positive, only 32% had begun antiretroviral therapy (ARV therapy).

An analysis of the cascade of services for MSM in 4 countries involved in the "Right to Health" project, Belarus, Georgia, Kyrgyzstan, and Armenia (at the time this review was prepared, there was no information from Macedonia) was carried out based on national studies conducted using the "Guide on Developing, Analyzing, and Using a Cascade of the Continuum of HIV Care for MSM" developed by ECOM. The studies were carried out by national LGBT community organizations and by other NGOS in cooperation with national ministries of health and specialists of medical institutions.

In developing a cascade of services in these 4 countries, researchers faced problems with the availability and quality of data. Some data is missing, simply due to a lack of research and services from which such data is generated. Thus, there is no data on key problems among MSM related to adherence to ARV therapy, because there are no relevant studies, while there is no data on the availability of mental health services, due to the lack of such services for MSM and trans\* people. Other data is not available, because there are no mechanisms for disaggregating more general data (for example, it is not possible to estimate the coverage of trans\* people by prevention interventions, because they are considered as "MSM" in national statistical forms). Stigma and discrimination based on sexual behavior and gender identity have a significant impact on the quality of data. Fears of MSM about encountering discrimination, and stigmatizing and abusive treatment by employees of healthcare



institutions is one of the key factors affecting data quality: the reluctance of MSM to inform healthcare workers about their sexual behavior leads to a distortion of statistics at all stages of the cascade, from the number of HIV-positive MSM who know their status to the number of HIV-positive MSM who receive ARV therapy and have reached an undetectable viral load.

Based on data from national studies, it can be said that Armenia is closest to approaching the first of the "90-90-90" targets: 75% of the estimated number of HIV-positive MSM know their status. In other countries, this stage of the cascade is the most problematic: only 6% of the estimated number of HIV-positive MSM know their status in Belarus, 12% in Kyrgyzstan, and 18% in Georgia.

The following were named by researchers as barriers to achieving the first "90" target (90% of HIV-positive MSM have been tested for HIV and know their status): low coverage of MSM by HIV prevention programs, which leads to a low coverage of MSM by HIV testing and poor awareness among MSM about HIV and about available services; stigma and discrimination on the part of medical service providers; and financial and administrative difficulties related to the provision of HIV testing by LGBT community NGOs.

In terms of achieving the second "90" target (90% of HIV-positive MSM know their status and receive ARV therapy), Armenia, Georgia, and Belarus demonstrate a similar level of results: 73%, 75%, and 79% respectively. Kyrgyzstan has made slightly less progress towards achieving this target, but its effort are still significant, with a level of 56%. Efforts made by countries to bring national HIV treatment protocols in line with the recommendations of the World Health Organization (WHO), and to initiate ARV therapy among people living with HIV (PLH) regardless of their CD4 count, are likely to facilitate the achievement of the target set for this stage of the cascade of services for MSM.

The situation regarding the achievement of the third "90" target, namely that those receiving ARV therapy have an undetectable viral load, looks the most promising. In some countries, this indicator for MSM is approaching global targets: in Georgia and Belarus, it is already almost equal to "90"! In Armenia and Kyrgyzstan, the percentage of MSM-PLH with undetectable viral loads is 71% and 64% respectively. These figures attest to the high quality of the work of infectious disease physicians and the effectiveness of the ARV treatment regimens being used.

Reasons for lagging behind global targets may include low adherence to ARV therapy, as well as the short time that has elapsed since the introduction by countries of WHO recommendations on initiating ARV therapy immediately after an HIV diagnosis.

The full country reports are available on ECOM's website on the "Knowledge Center" page.



#### Introduction

The HIV epidemic in EECA countries continues to develop: the number of newly registered cases of HIV infection and AIDS mortality are both increasing.

The total number of new cases of HIV infection in the EECA region increased by 30% since 2010<sup>1</sup>. In 2017, 130,000 new cases of HIV infection and 34,000 deaths from AIDS were recorded<sup>2</sup>. Access to ARV therapy in the region remains among the lowest in the world, while the cost of drugs is one of the highest among middle-income countries<sup>3</sup> <sup>4</sup>. In addition, the coverage of key populations, including MSM and trans\* people, in the EECA region by regular HIV testing is decreasing, which leads to the late detection of HIV infections and the late initiation of HIV treatment among a significant number of PLH.

One important tool for ending the HIV/AIDS epidemic is the treatment of HIV using antiretroviral drugs. ARV therapy significantly reduces the mortality among people infected with HIV and is an effective method for preventing HIV infection, especially if treatment is initiated immediately after diagnosis and if there is wide access to treatment**Error! Bookmark not defined.** In turn, achieving a high level of viral suppression among PLH, to the point that their viral load is undetectable, plays a key role in reducing the impact of HIV, helping to improve the quality of life of PLH and reducing the number of new HIV infections<sup>5</sup>. According to WHO recommendations and its "testing and treatment" strategy<sup>6</sup>, it is necessary to initiate ARV therapy among HIV-positive people immediately after the diagnosis of HIV infection, regardless of their CD4 count or viral load<sup>7</sup>.

In 2014, the United Nations Joint Programme on HIV and AIDS (UNAIDS) and its partners initiated three ambitious targets, called "90-90-90", which must be achieved by 2020 to effectively respond to the HIV epidemic:

- 90% of all people living with HIV will know their status;
- 90% of all people who know their HIV-positive status will receive ARV therapy;
- 90% of all people receiving ARV therapy will have a suppressed viral load<sup>8</sup>.

For a visual measurement and demonstration of the progress made towards the "90-90" targets, an HIV treatment cascade is useful, as it reflects the availability of services and demonstrates the ratio of those who need services and those who receive them, and,

<sup>&</sup>lt;sup>1</sup> Global AIDS update 2018: Miles to go the response to HIV in Eastern Europe and Central Asia. – Режим доступа к pecypcy: <u>http://www.unaids.org/sites/default/files/media\_asset/miles-to-go\_eastern-europe-and-central-asia\_en.pdf</u>

<sup>&</sup>lt;sup>2</sup> 2017 GLOBAL HIV STATISTICS UNAIDS. – Режим доступа к ресурсу:

http://www.unaids.org/sites/default/files/media\_asset/UNAIDS\_FactSheet\_en.pdf

<sup>&</sup>lt;sup>3</sup> Сборник успешных практик по улучшению доступа к континууму услуг в связи с ВИЧ для всех, кто в этом нуждается, в регионе ВЕЦА. – МБО «Восточноевропейское и Центральноазиатское объединение людей, живущих с ВИЧ», 2016. – Режим доступа к ресурсу: <u>http://mv.ecuo.org/wp-content/uploads/sites/4/2018/08/fin\_bucklet.pdf</u>

<sup>&</sup>lt;sup>4</sup> Концепция по доступу к лечению. — МБО «Восточноевропейское и Центральноазиатское объединение людей, живущих с ВИЧ», 2017. – Режим доступа к ресурсу: <u>http://mv.ecuo.org/wp-</u> <u>content/uploads/sites/4/2018/08/KONTSEPTSIYA-VTSO-LZHV-WEB.pdf</u>

<sup>&</sup>lt;sup>5</sup> ECDC SPECIAL REPORT Thematic report: Continuum of HIV care Monitoring implementation of the Dublin Declaration on partnership to fight HIV/AIDS in Europe and Central Asia: 2017 progress report. – Режим доступа к pecypcy: https://ecdc.europa.eu/sites/portal/files/documents/Continuum-of-HIV-care-2017.pdf

<sup>&</sup>lt;sup>6</sup> WHO Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: Recommendations for a public health approach. – Second edition. – 2016. – Режим доступа к ресурсу: <u>http://www.who.int/hiv/pub/arv/arv-2016/en/</u>

<sup>&</sup>lt;sup>7</sup> Treatment as prevention (TASP) for HIV. – Режим доступа к pecypcy: <u>https://www.avert.org/professionals/hiv-programming/prevention/treatment-as-prevention#footnote9\_l51gqoc</u>

<sup>&</sup>lt;sup>8</sup> UNAIDS 90-90-90 An ambitious treatment target to help end the AIDS epidemic. – 2014. – Режим доступа к ресурсу: <u>http://www.unaids.org/sites/default/files/media\_asset/90-90-90\_en.pdf</u>



accordingly, where gaps in coverage/availability and in the quality of HIV prevention and treatment services are concentrated<sup>9</sup>.

As of the end of 2017, 73% of the 1.4 million PLH in the EECA region know their HIVstatus, meaning the 240,00 PLH who do not know their HIV status are still lagging behind the first of the three "90" targets. 36% of all PLH in the region have access to ARV therapy. 635,000 PLH who are not receiving HIV treatment are lagging behind the achievement of the second "90" target. The percentage of PLH who are receiving ARV therapy and who have an undetectable viral load was 26%: therefore, 668,000 PLH are lagging behind the achievement of the third "90" target<sup>10</sup>.

Reasons for the lack of access of PLH to medical support and treatment, delays in the initiation of ARV therapy, and for the low adherence to or refusal of treatment include poor awareness about available services, rights violations in medical institutions, stigma and unfriendly attitudes on the part of healthcare workers towards PLH and representatives of all key populations, including MSM and trans\* people, as well as procedural and geographic barriers<sup>11</sup>.

MSM are one of the key groups vulnerable to HIV and accounted for 21% of all new HIV cases in EECA countries in  $2017^{12}$ . HIV prevalence among MSM in EECA countries ranges from 0.8% in Armenia to 20.7% in Georgia and 22.8% in Saint Petersburg (Russia)<sup>13</sup> (*Fig.* 1)



Fig. 1 HIV prevalence among MSM in EECA countries

The estimated sizes of MSM populations in implementing countries of the project "Right to Health" is presented in *Fig. 2.* 

<sup>&</sup>lt;sup>9</sup> Руководство по составлению, анализу и использованию каскада непрерывной помощи для МСМ в связи с ВИЧинфекцией

<sup>&</sup>lt;sup>10</sup> Global AIDS update 2018: Miles to go the response to HIV in Eastern Europe and Central Asia. – Режим доступа к pecypcy: <u>http://www.unaids.org/sites/default/files/media\_asset/miles-to-go\_eastern-europe-and-central-asia\_en.pdf</u>

<sup>&</sup>lt;sup>11</sup> Сборник лучших практик по улучшению доступа к континууму услуг в связи с ВИЧ для всех, кто в этом нуждается, в регионе ВЕЦА. – Международной благотворительной организацией «Восточноевропейское и Центральноазиатское объединение людей, живущих с ВИЧ», 2017. – Режим доступа к ресурсу: <u>http://mv.ecuo.org/wp-</u>content/uploads/sites/4/2018/08/luchshyje-praktiki\_web.pdf

<sup>&</sup>lt;sup>12</sup> Global AIDS update 2018: Miles to go the response to HIV in Eastern Europe and Central Asia. – Режим доступа к pecypcy: <u>http://www.unaids.org/sites/default/files/media\_asset/miles-to-go\_eastern-europe-and-central-asia\_en.pdf</u>

<sup>&</sup>lt;sup>13</sup> UNAIDS Countries Data. – Режим доступа к ресурсу: <u>http://www.unaids.org/en/regionscountries/countries/</u>



Оценочная численность МСМ

Fig. 2

In the majority of countries of the region, MSM are not sufficiently covered by HIV testing services: less than half of MSM have been tested for HIV in the last 12 months and know their status (*Fig. 3*).



Fig. 3 MSM that have been tested for HIV in the last 12 months and know their status

There are gaps in data on HIV among MSM for most EECA countries: often data is limited, of low quality, not collected regularly, or not collected at all. Data on the coverage of MSM by ARV therapy is extremely limited. Studies show that strategic information about HIV among MSM and trans\* people in EECA countries is insufficient<sup>14</sup>.

Disaggregated data on the access of vulnerable groups to HIV diagnosis and treatment services is limited. Only a few countries of the region have established HIV treatment cascades for MSM: national monitoring systems do not track statistics on specific key groups and their access to HIV treatment, care, and support<sup>9</sup>.

<sup>&</sup>lt;sup>14</sup> Оценка существующей стратегической информации о ВИЧ среди МСМ и транс людей в Армении, Беларуси, Грузии, Кыргызстане и Македонии. – EKOM. – 2018. – Режим доступа к pecypcy: <u>https://ecom.ngo/wp-content/uploads/2018/09/SI-Inforamtion-inforgafica\_rus.pdf</u>



#### Cascade of HIV services for MSM in the EECA region: literature review

It is worth noting that few HIV treatment cascades for MSM have been developed in EECA countries. Several cascades of services for MSM are openly available in EECA countries, but such information is either outdated or cannot be compared with cascades from other countries due to limitations in the data collection method of the cascade. Most EECA countries have cascades of HIV services that reflect the situation among PLH in general, but which do not disaggregate data to depict the situation of individual key populations.

Nevertheless, among published studies on the cascade of HIV services for MSM, it is necessary to highlight the cascade of services for MSM of the Russian Federation, in which the majority of new cases of HIV infection occur in the EECA region.

The cascade of HIV services was developed based on a sample of 184 MSM who tested positive for HIV as part of an IBBS carried out in Moscow from 2010 to 2013<sup>15</sup> <sup>16</sup>.

As seen in *Fig. 3*, the largest gap in coverage of HIV+ MSM is seen at the stage of detecting HIV infection: 77% of all HIV-positive MSM in the country remain unaware of their HIV status.



#### Fig. 4 Cascade of HIV services for MSM in Moscow, Russian Federation (among MSM who tested positive for HIV during 2010-2013 IBBS)

In Ukraine, which has the second highest number of new HIV cases in the EECA region, the estimated number of HIV-positive MSM is 13,553 people. The cascade of services for MSM was developed based on the results of an IBBS carried out in 2017-2018<sup>17</sup> (*Fig. 4*).

The percentage of MSM with HIV who know their status is 59%. 78% of MSM aware of their HIV status are receiving ARV therapy. 76% of those receiving treatment have an undetectable viral load. As can be seen, the largest gap in coverage and in the involvement of HIV+ MSM in receiving assistance and support is again concentrated at the first stage of the cascade of services for MSM.

<sup>&</sup>lt;sup>15</sup> <u>https://ecom.ngo/wp-content/uploads/2018/01/nihms786269.pdf</u>

<sup>&</sup>lt;sup>16</sup> <u>http://www.croiconference.org/sites/all/abstracts/967.pdf</u>

<sup>&</sup>lt;sup>17</sup> Сазонова Я. О., Салюк Т. О. Основні результати біоповедінкових досліджень серед ключових груп. – МБФ «Альянс громадського здоров'я». – Київ, 2018. – Режим доступу до ресурсу: <u>http://aph.org.ua/wp-content/uploads/2018/07/OSNOVNI-REZULTATY</u> A4 10.07.2018 Cajt.pdf



Fig. 5 Cascade of HIV services for MSM in Ukraine (according to results of 2017-2018 IBBS.)

The cascades of HIV services for MSM in Tajikistan (*Fig. 6*) and Kazakhstan (*Fig. 7*) are based on 2015 data, which may be of low quality<sup>18</sup>. However, in the absence of other, more reliable data, these cascades can serve as a guideline for a general understanding of the situation in these countries

In Tajikistan, the greatest gap is most likely observed at the stage of identifying HIVpositive MSM: only 19% of the estimated number of HIV-positive MSM are aware of their HIV status. More progress has been made towards achieving the third "90" target: 53% of MSM who are receiving ARV therapy have an undetectable viral load. In Kazakhstan, there is probably the same gap in the first and second of the "90-90-90" targets: 35% of all HIV-positive MSM are aware of their status and 32% of those who know their status are receiving ARV therapy.



Fig. 6 Cascade of HIV services for MSM in Tajikistan (2015)

<sup>&</sup>lt;sup>18</sup> Gupta, S., & Granich, R. (2017). National HIV Care Continua for Key Populations: 2010 to 2016. Journal of the International Association of Providers of AIDS Care (JIAPAC), 125–132. – Режим доступу до ресурсу: https://doi.org/10.1177/2325957416686195



Fig. 7 Cascade of HIV services for MSM in Kazakhstan (2015)



# Cascades of HIV services for MSM and trans\* people in implementing countries of the "Right to Health" project

This section presents the results of the analysis of cascades of HIV services for MSM, compiled as part of the national studies carried out in 4 countries of the "Right to Health" project: Armenia, Kyrgyzstan, Georgia, and Belarus (at the time this review was developed, there was no information from Macedonia). The indicators of the cascade of services are presented in *Table 1*. As can be seen, the greatest lag in all countries occurs at the first stage of the continuum of services.

# Table 1. Data of the cascades of HIV services for MSM in 4 countries of the project "Right to Health"

	Estimated number of MSM living with HIV	MSM who know their HIV-status out of the estimated number of HIV- positive MSM	MSM who are taking ARV therapy out of the number of those who know their HIV status	MSM who have an undetectable viral load out of those who are receiving ARV therapy
Armenia	100	75%	73%	<b>71</b> %
Kyrgyzstan	1115	12%	<mark>56</mark> %	<mark>64</mark> %
Georgia	3560	18%	75%	88%
Belarus	4 621	6%	82%	82%

#### Level of achievement of the "90-90-90" targets:

>80%	
50-79%	
0-49%	

It should be noted that the completeness of the information reflected in the cascades of HIV services compiled by LGBT organizations in cooperation with experts from national ministries of health varies between countries. Due to the availability of information, the capabilities of each group of researchers, as well as to other factors, the analysis of the reasons for lags in the cascade from the target indicators is presented by different groups of researchers in different ways.

A common problem for countries when compiling cascades on the progress made in achieving the "90-90-90" targets for HIV-positive MSM is the availability and quality of data used in developing such cascades. Limitations in data may be a reason that the cascade does not fully correspond to reality. Nevertheless, the use of data of insufficient quality can be acceptable if we not only aim to describe the current situation, but also to improve the quality of data in the future.

**In Armenia**, the results of an IBBS, as well as data from the Republican AIDS Prevention Center and from the project "Prevention and Increasing Awareness of HIV/AIDS among MSM and Trans\* People" is presented in the cascade of HIV treatment for MSM. According to the information of the research group, the methodology of the study was not always adhered to during the IBBS, and a significant part of the MSM involved in the study did not actually belong to this group. According to experts from LGBT community organizations, respondents who were not MSM presented themselves as such in order to receive the compensation offered as part of the study. This risk was not taken into account when planning the data collection



process for the IBBS. As a result, the HIV prevalence among MSM in Armenia was very likely underestimated.

There is no information about trans\* people in the country.

Data from AIDS Centers and NGOs working in the field of HIV prevention among MSM (PO "Kyrgyz Indigo" and the Association "AntiAIDS"), as well as program data from international organizations and the UNFPA, which is implementing the main HIV prevention and treatment program in the country was used to develop an HIV treatment cascade for MSM in **Kyrgyzstan**. In addition to consultations with experts, a focus group was conducted with HIV-positive MSM as part of the analysis of the data collected. During the focus group, the assertion of researchers that some HIV-positive MSM hide information about their sexual behavior from healthcare workers was confirmed. This often occurs during HIV testing, even though basic statistics on the distribution of HIV cases among various populations are generated during the testing phase. Collecting additional qualitative and quantitative data to analyze the statistics collected on coverage by HIV testing and treatment services makes it possible to qualitatively analyze the quality of the data collected and the reasons for lags in the achievement of the "90-90-90" targets.

Trans\* people were recently added to the key populations monitored for HIV in the country, however, routine data collection on HIV prevention and treatment among trans\* people has not yet begun.

In **Belarus**, data from the Republican Center for Hygiene, Epidemiology, and Public Health and calculations of the "Spectrum" program were used in the development of the cascade. The quality of the data collection was assessed with the help of community experts and specialists.

In Belarus, a significant limitation in general is the lack of a system for collecting strategic information on HIV in the public healthcare system. As a rule, only basic epidemiological data is collected, which is not disaggregated, and makes it difficult to carry out a full analysis. This in turn affects the quality of research results in the country and the development of a cascade.

Information about trans\* people is not collected.

In **Georgia**, program data from a project implemented with funding from the Global Fund, data from regular epidemiological research and surveillance, as well as calculations of the "Spectrum" program provided by the Infectious Diseases, AIDS, and Clinical Immunology Research Center served as the source of data for the cascade. The analysis was conducted with the involvement of national and local LGBT community NGOs providing HIV prevention services, and public institutions from the public health sector.

The researchers noted the lack of a unified methodology for estimating the number of MSM in the country.

The fact that there is no data on HIV testing and treatment among trans\* people in the country was also highlighted.

#### Estimated number of HIV-positive MSM

Researchers experienced difficulties with the data that was collected for the purposes of estimating the number of HIV-positive MSM.

For example, in Armenia, results of the IBBS were used to generate data on this issue, which raised questions about its reliability. In Kyrgyzstan, estimates of the MSM population size were carried out in 2013 and 2016, as part of which two age groups were reviewed: those 16–49 years old in 2013, and those 18–49 years old in 2016 (data from the latest assessment



was used to develop the country cascade). The number of MSM living with HIV in Georgia was calculated based on data from the "Spectrum" program and was estimated to be 3,800 people. However, national experts in Georgia find this number to be too high. The calculation can be carried out in a different way, using the HIV prevalence among MSM (20.7%) and the estimated number of MSM in the country (17,200), so the number of MSM living with HIV would be 3,560 people. In Belarus, the estimated number of MSM-PLH is also calculated according to data from the "Spectrum" program, which differs from the results of the IBBS. In general, there are difficulties in obtaining objective data on the true number of HIV-positive MSM in Belarus. The estimated number of HIV-positive MSM is presented in *Fig. 7*.



Fig. 8 Estimated number of HIV-positive MSM

#### MSM who know their HIV-positive status

Knowing one's HIV status is the first step in the "90-90-90" cascade, and perhaps the most important, since the level of achievement of this indicator determines the effectiveness of subsequent efforts to enroll HIV-positive MSM in treatment<sup>19</sup>.

HIV testing is essential for the timely detection of HIV cases and the initiation of treatment. This means that low levels of coverage by HIV testing, and the presence of barriers that affect the desire and ability of MSM to undergo HIV testing, can lead to the late detection of HIV infection. Thus, the risk of HIV transmission is increased in the case of HIV-positive MSM who do not know their HIV status.

It is at this stage of the cascade that the greatest problems with achieving the targets are observed in most countries: all countries where it was possible to collect data show a low level of coverage of MSM by HIV testing. A number of countries, Kyrgyzstan, Georgia, and Belarus, are particularly far from reaching the first "90" target (90% of MSM living with HIV know their HIV status). Only around 11% of the estimated number of HIV-positive MSM in these three countries know their HIV status and only 10% of these have initiated ARV therapy.

Researchers point out that MSM have a low level of trust in public health institutions, and often hide information about their sexual behavior during HIV testing due to fears of encountering stigma and discrimination because of their sexual orientation. Researchers also note that cases of disclosure of personal information and unprofessional communication continue to occur regularly when MSM and trans\* people seek counseling and assistance related to HIV and other sexual health issues. Thus, cases of HIV identified in national surveillance systems are often recorded as having occurred by a means of transmission other than through sex between men.

As a result, official data of AIDS Centers on the number of HIV-positive MSM who know their status and who are receiving care can be underestimated, which is actually confirmed by

<sup>&</sup>lt;sup>19</sup> Ending AIDS Progress towards the 90–90–90 targets. – UNAIDS. – 2017. – Режим доступу до ресурсу: <u>http://www.unaids.org/sites/default/files/media\_asset/Global\_AIDS\_update\_2017\_en.pdf</u>



the discrepancies between data collected by medical institutions, data obtained through IBBS, and data obtained by the prevention and support programs of community NGOs.

Out of the countries reviewed, the lowest level of progress in achieving the first "90" target is seen in Belarus. The results in Kyrgyzstan and Georgia are also unsatisfactory. Armenia is closest to achieving the target, but the report of the national research team emphasizes that the cascade does not depict the real HIV situation among MSM (*Fig. 8*).



Fig. 9 MSM who know their HIV-positive status

In **Kyrgyzstan**, according to data from the AIDS Center, 135 MSM know their HIV-positive status, which is 12% of the estimated number of HIV-positive MSM. At the same time, this data contradicts the IBBS data, according to which 26% of MSM are aware of their HIV-positive status. Such differences can be explained by the fact that, under the anonymous conditions of the IBBS, MSM were not afraid to provide information about their sexual preferences and to openly answer questions about knowing their HIV status.

Self-stigmatization and sensitive attitudes about their own sexual lives also impacts the coverage of MSM by HIV testing. Representatives of the community themselves may consider the questions asked by medical personnel about sexual practices to be offensive and too personal. Studies show that the country has the highest level of internalized homophobia among the 13 EECA countries<sup>20</sup>. In addition, there is evidence that healthcare workers have an openly negative attitude towards LGBT people in the country<sup>21</sup>.

The largest gap in this stage of the cascade is observed in Georgia: only 640 MSM out of the estimated number of 3,560 MSM-PLH know their HIV-positive status (18%), which means that more than 80% of HIV-positive MSM in the country are not aware of their status, and have not initiated ARV therapy. It is worth noting that the problem of PLH not knowing their HIV status is relevant to Georgia as a whole: more than half of the estimated number of PLH in the country have not been tested for HIV and are not aware of their positive HIV status.

<sup>&</sup>lt;sup>20</sup> Шестаковский А., Касянчук М. Исследование интернализированной гомонегативности (внутренней гомофобии) : Аналитический отчёт / Евразийская коалиция по мужскому здоровью (ЕКОМ). – Таллинн, 2018. – 161 с.

<sup>&</sup>lt;sup>21</sup> Москотина Р. и др. Исследование отношения к ЛГБТ среди сотрудников ключевых социальных сервисов пяти стран Центральной и Восточной Европы и Центральной Азии в рамках Региональной программы ЕКОМ «Право на здоровье» / Р.Москотина, Н.Дмитрук, О.Трофименко, Ю.Привалов, М.Касянчук (Евразийская коалиция по мужскому здоровью). – Таллинн, 2017. – 94 с.



Over the past few years, there has been a trend towards a reduced level of knowledge about HIV among key populations: compared with their peers in the past, younger representatives of all key populations less often have the necessary information about HIV, including about where they can be tested and receive support. At the same time, low awareness about HIV is inherent among the MSM community as a whole.

In **Belarus** only 6% of the estimated number of MSM-PLH know their HIV status.

This existing lag from the target indicator may be due to a lack of state financial resources for purchasing HIV tests and paying for the infrastructure needed for testing and support services. The current state HIV response program does not single out MSM as a separate vulnerable group. Funding under the program is not allocated in a targeted manner, but rather has interventions aimed at the "population as a whole", which are not specialized by key population.

Therefore, there are apparently gaps in the coverage of MSM by HIV prevention programs in Belarus: only 19% of the estimated number of MSM in the country are covered by information and support programs. Very few HIV-positive MSM, only 7% of the planned 40%, have access to peer counseling and support aimed at acceptance of one's HIV infection and at developing sustainable adherence to treatment.

In **Armenia**, the estimated number of HIV-positive MSM was 100. 75 of these men know their HIV status, which corresponds to 75% for the first target of the HIV treatment cascade for MSM. If the estimate of the number of HIV-positive MSM in the country is correct, in order to achieve the first "90" target, another 15 HIV-positive MSM in Armenia must be provided assistance in finding out that they are infected with HIV.

Despite the impressive statistics, researchers indicate that there are significant barriers to developing HIV testing among MSM in Armenia. For instance, there are administrative barriers to the organization of HIV testing by NGOs, if rapid tests using blood drawn from fingers are used. However, it is important to emphasize that, since 2017, NGOs can conduct selective HIV testing using rapid tests that use circulatory fluid (so-called "saliva tests"). These tests are supplied with the financial support of international donors. However, rapid tests using saliva are more expensive than those that use blood, and since the country is in a transitional phase from international to national funding, it is unlikely that the government will purchase saliva tests with state funding. Researchers believe that another barrier to wider coverage by testing services is that the confirmation of HIV status and the initiation of ARV therapy in Armenia is only possible at the National AIDS Center in Yerevan. This may demotivate people living in other cities.

#### MSM that know their status and are receiving ARV therapy

Until recently, national clinical protocols were in effect in countries, according to which ARV therapy was only initiated once a certain CD4 count was detected in PLH. As a result of these rules, HIV-positive patients were required to regularly undergo blood testing, often for years, to determine their CD4 count, waiting for their condition to worsen enough to qualify for treatment. Some PLH could drop out from programs while awaiting access to treatment.

Over the past 3 years, national clinical protocols for the treatment of HIV in EECA countries have been revised, and have taken into account new WHO recommendations, according to which ARV therapy should be provided to all PLH, regardless of the CD4 count of the patient. For example, such changes were adopted in 2015 in Georgia, in 2017 in Kyrgyzstan and Armenia, and in 2018 in Belarus.



The greatest lag in the achievement of the second "90" target (90% of MSM who know their status are receiving ARV therapy) is observed **Kyrgyzstan**, where 56% of the number of HIV-positive MSM who know their status are receiving ARV therapy. In **Belarus**, this indicator is 79%, however, sufficient objective data on the true number of HIV-positive MSM who are receiving ARV therapy is not available in the country. In **Armenia** and **Georgia**, the percentage of MSM who know their HIV-positive status and who are receiving ARV therapy is 73% and 75% respectively (*Fig. 9*).



Fig. 10 MSM who know their status that are receiving ARV therapy

### HIV-positive MSM receiving ARV therapy and have an undetectable viral load

The situation with respect to the achievement of an undetectable viral load among those receiving ARV therapy looks the most promising. In some countries, this indicator for MSM is nearing global targets: in Georgia and Belarus, this indicator is almost equal to "90"! This attests to the high quality of the work of infectious disease physicians and the effectiveness of the ARV treatment regimens being used.

The introduction of optimized treatment regimens and dosage forms of drugs can increase the effectiveness and duration of ARV therapy and may increase adherence to treatment and strengthen suppression of the virus<sup>22</sup>.

The use of new antiretroviral drugs may speed up suppression of viral loads, have fewer side-effects and a lower risk of resistance, and may also have the potential to reduce treatment costs and increase the effectiveness of treatment programs<sup>22</sup>

Today, in the countries reviewed, updated treatment regimens that include the use of new drugs have been added to national HIV treatment protocols. Practically all countries were able to make significant strides towards the achievement of the third "90-90-90" target, namely that 90% of MSM living with HIV and receiving ARV therapy have an undetectable viral load. At this stage, the majority of the countries demonstrate significant achievements: in

<sup>&</sup>lt;sup>22</sup> Краткое руководство ВОЗ Лечение ВИЧ-инфекции переход на новые антиретровирусные препараты в программах противодействия ВИЧ-инфекции. – Режим доступа к pecypcy: http://ecuo.org/wp-content/uploads/2018/02/polisi-brif-RED-web.pdf



**Georgia**, 88% of MSM living with HIV and receiving ARV therapy have an undetectable viral load, in **Belarus** – 81.5%, in **Kyrgyzstan** – 64%, and in **Armenia** – 71% (*Fig. 10*).



Fig. 11 HIV-positive MSM receiving ARV therapy that have an undetectable viral load



#### Conclusions

- 1. The cascade as a monitoring tool:
- The "Guide on Developing, Analyzing, and Using a Cascade of the Continuum of HIV Care for MSM" allows LGBT community organizations and other NGOs to effectively assess the coverage of MSM and trans\* people by HIV prevention and treatment services, and the quality of these services. This includes developing a research plan, forming the necessary partnerships, including with representatives of national ministries of health and specialists from healthcare institutions, and then collecting and analyzing data with the meaningful involvement of the community and other stakeholders in this process.
- The "Guide" also allows for the determination of which data necessary for decisionmaking related to national HIV response programs is unavailable or of insufficient quality. Some data may be missing simply due to a lack of research or a lack of services as part of which such data is developed. For instance, there is no data on key problems linked to the adherence of MSM to ARV therapy, because there are no relevant studies, while data on the availability of mental health services does not exist, because there are no such services for MSM and trans\* people. Other data is unavailable, because there are no mechanisms for the disaggregation of more general data (for example, it is not possible to assess the coverage of trans\* people with prevention interventions, because they are considered as MSM for statistical purposes). Stigma and discrimination on the basis of sexual behavior and gender identity have a significant impact on the quality of data. For example, the actual number of MSM who know their HIV-positive status may be greater, but the distrust of MSM towards healthcare workers may prevent them from discussing their same-sex sexual practices. As a result, the cascades developed based on data of doubtful reliability may not reflect the real HIV situation among MSM in the country and may lead to the adoption of ineffective program, advocacy, and strategic decisions.

Main lags/gaps in the cascade:

- The countries reviewed show significant lags in the achievement of all "90-90-90" targets, however, the greatest gaps occur at the very first stage, according to which HIV-positive MSM should have the opportunity to learn about their positive HIV status.
- The significant number of MSM who are not aware of their HIV status indicates a lack of coverage of MSM by HIV prevention programs, and, in particular, by HIV testing and related support services. This suggests that existing prevention programs, and the methods and/or funding for these programs, do not correspond to the needs of MSM and trans\* people. This also indicates that a very significant number of MSM and trans\* people living with HIV still do not have access to ARV therapy, which threatens their health and lives, and contributes to the further spread of HIV infection in countries of the region.

Recommendations on the availability and quality of data



In order to improve the availability and quality of data for the development of a cascade of HIV services for MSM and trans\* people, it is necessary to:

- Facilitate the collection of reliable data on the estimated number of MSM in the country as a matter of priority. This refers to necessary, basic data, the quality of which determines the effectiveness of the planning of and investments in all national programs to counteract the HIV epidemic. It is necessary to promote the official adoption by countries of a method for estimating the population sizes of key populations, including gay and other MSM and trans\* people, that is based on international best practices.
- 2. Review national indicators for HIV prevention and treatment programs to ensure that they allow for the effective monitoring of the prevalence of risky behavior, HIV prevalence, comorbidity and biomarkers, as well as of the availability and quality of services necessary for the effective prevention and treatment of HIV. To do this, sets of national indicators should include the following: explicit references to gay, other MSM, and trans\* people as key populations; a list of necessary prevention and treatment services for MSM and trans\* people, based on national and international best practices; and guidelines on the required quality of data and ways of ensuring this quality.
- 3. Improve monitoring of IBBS implementation among MSM, in order to facilitate adherence to the research methodology and the mandatory meaningful involvement of community organizations, which should ensure improvements in the quality of the collection and analysis of data.
- 4. Include questions and mechanisms in regular national studies on the progress made in fighting the spread of the HIV epidemic, that will allow for the collection of data necessary to develop and analyze cascades of comprehensive HIV services for MSM and trans\* people.
- Use the triangulation method to assess the conformity of data on coverage and the quality of HIV prevention and treatment services for MSM and trans\* people: IBBS data, data of AIDS Centers and other healthcare institutions, NGO data, and calculations of the "Spectrum" program.
- Contribute to strengthening the capacity of community organizations, governmental agencies and healthcare institutions to collect, analyze, and use strategic information on HIV among MSM and trans\* people.
- Develop cooperation between community organizations and specialists providing health services to MSM and trans\* people in order to overcome discrimination and stigma based on sexual behavior and gender identity as key barriers to the effective collection and analysis of data needed to combat the spread of HIV.

Appendix: country cascades of HIV services for MSM

Georgia





#### Armenia



#### Belarus



## Kyrgyzstan



The full texts of the country reports are available on ECOM's website on the "Knowledge Center" page.