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HIV-positive men: Treatment response and survival on antiretroviral therapy

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Abstract. The relevance of the study is determined by the established prevalence of issues among adult men living with human immunodeficiency virus in key populations, as well as the higher risk of treatment failure observed among men in the general population. The objective of this study was a survival evaluation of heterosexual men and men who have sex with men. 4,304 HIV-positive adult males who acquired human immunodeficiency virus via sexual transmission have been analysed: 3,651 heterosexuals and 653 men, who have sex with men, with people who inject drugs (3,766) excluded. CD4 cell count and viral load results were used to evaluate effectiveness, with additional data on adherence. As compared to men who have sex with men (MSM) (74.9%), heterosexuals signed up for clinical observation more often (in 61.3% of all cases). The general male population has been lost to follow-up and diagnosed at advanced stages of human immunodeficiency virus more often – 80.2% of men who have sex with men who initiated antiretroviral therapy in 2023-2026 were diagnosed on the first stage of the disease, as opposed to 60.1% of heterosexuals in the same category. In the last 3 years virological (80.7% and 66.1% of MSM and heterosexuals with undetectable viral load) and immunological effectiveness of heterosexual males (90.9% vs.77.5% of CD4 cell count of greater than 200 respectively) have been inferior to men who have sex with men. The Kaplan Meier curve showed a higher probability of survival among men who have sex with men. This research brings an insight to social support and higher awareness among men who have sex with men may explain their better results

Keywords: heterosexual men; therapy effectiveness; men who have sex with men; viral load suppression; survival analysis

Introduction

In Kyrgyzstan increasing cases of human immunodeficiency virus (HIV), as noted in the sources in paragraphs below, especially among young people, reduce the quality of life, physical and mental health; it requires lifelong medicated therapy, thus influencing the economic welfare of the country. The infection is spread rapidly due to a challenging socio-economic situation in the republic, low awareness among the population and stigma. This growth also increases the risk of vertical transmission among newborns. The effective but lifelong therapy reduces the risk of transmission by the sexual route; however, it offers challenges in adherence to it. The key groups are considered vulnerable to the infection, while facing stigma and have been receiving substantial support from international donors. Those programs were designed to reduce stigma and encourage early testing, as well as early diagnosis and initiation of antiretroviral therapy, corresponding to the 95-95-95 cascade goal with positive results. However, similar challenges are met by the general population as well. Stigma becomes an obstacle in early testing, proper medical observation and therapy among all groups of population.

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Despite significant medical progress, the HIV/AIDS (acquired immunodeficiency syndrome) epidemic remains a major global health challenge, with a total death toll of about 44.1 million. By the end of 2024, nearly 40.8 million people were living with the virus. That same year 1.3 million new infections and 630,000 deaths linked to the disease. Although a clear cure is still out of reach, the growth of diagnostic tools, preventive measures, and care has changed HIV into a manageable chronic illness, which allows patients to maintain a good quality of life over the long term [1]. In Asia and the Pacific, MSM account for 44% of all new HIV diagnoses [2]. Research "Men who have sex with men…" [2] showed that MSM are 26 times more likely to contract HIV compared to the general adult population. However, as explored further in, heterosexual men might have unmet needs. While antiretroviral therapy (ART) adherence has been well-studied in MSM, few studies have specifically examined the determinants of low ART adherence among HIV-positive men who have sex with women (MSWo). S. Cahill *et al*. [3] stated that while racial and ethnic disparities have received significant attention, the risks that MSM is facing remain largely invisible due to a lack of due to stigma and discrimination.

In the Kyrgyz Republic, as of January 2025, according to Republican centre for the control of blood-borne viral hepatitis and HIV [4], 14,322 cases of HIV had been reported, 5,774 of them receiving antiretroviral therapy; 3,581 of all the people living with HIV died. Men of 18 years of age and older account for 8,824 of all HIV-positive people, which makes up 55.6% of the adult population; 45.5% are women. According to Ch. Jumalieva *et al*. [5], MSM in Bishkek and Osh carry a high burden of HIV compared to the general adult male population in these cities. The study of Ch. Jumalieva *et al*. [5] is the extensive research of risks and behavioural patterns among key groups of men. Non-Governmental Organisations are the main and most trusted sources of HIV services for MSM in the Kyrgyz Republic. In Bishkek, 59.3% of MSM prefer them for testing instead of public hospitals. NGOs supply free prevention materials, such as condoms and lubricants to the MSM community. In Osh, they are still crucial for reaching marginalised groups. Generally, as had been shown in the prevoius study by Z. Shabdan kyzy *et al*. [6], men have lower survival expectancy than women.

While there is a significant shift in trends towards sexual transmission in Kyrgyzstan in the last decade, it creates an unfavourable epidemiological environment for further transmissions, according to Ch. Jumalieva *et al*. [5] and I. Kirillova & N. Orhun [7] in a study showing a decade of rising trends for 2012 to 2022 as the 95-95-95 strategy had only reached the numbers of 86-75-77, respectively, by the end of 2023 [4]. A study by E. Gruszczyńska & M. Rzeszutek [8] in Poland revealed that while heterosexual men are the majority in the general population, they are a "relative minority" within the population of people living with HIV. This creates a "double source of stress": they suffer from an illness perceived as belonging to stigmatised key groups while having a sexual orientation historically unrelated to HIV transmission. The study of N. Jangu *et al*. [9] found that the societal pressure influence HIV vulnerability as for some men, masculinity as having multiple partners becomes a way to "prove manhood".

Masculinity norms prevent many straight men from admitting vulnerability and discourages them from discussing their health or seeking testing. T. Kazuma-Matululu & A. Nyondo-Mipando [10] found that heterosexual men perceived that stigma triggers avoiding being discovered and discriminated against. In the observational study of HIV-1 patients in China by J. Liu *et al*. [11] MSM had better outcomes in immune recovery compared to heterosexuals. Identifying as MSM was strongly associated with achieving CD4 counts ≥500 cells/μL. Being male and having a heterosexual route of infection were the factors associated with a higher mortality. That research, however, does not provide the socio-behavioural factors. Collectively, these findings highlight the need for a comprehensive assessment of both clinical outcomes and underlying socio-behavioural factors influencing HIV treatment effectiveness among different groups of men. The aim of the study was to compare the survival outcomes, virological and immunological efficacy, presentation at diagnosis and adherence to ART in MSM and heterosexual men among HIV positive adults in the Kyrgyz Republic, and to identify the causes further and improve HIV healthcare services and clinical outcomes.

Materials and Methods

The study was carried out using a comparative retrospective cohort method in order to identify exposures influencing current health outcomes. The data has been provided by the Republican Centre of HIV and blood-borne viral hepatitis control via the national HIV incidence digital tracking system, a vast database containing all registered cases of HIV in the Kyrgyz Republic from 1987 to 2024. The database of 14,322 HIV cases has been analysed using Microsoft Office tools for sorting the data by age, transmission route, the time of antiretroviral therapy initiation, disruption of ART and deaths. The criteria for inclusion were adult age (18 years of age and older), male by gender, who acquired HIV via sexual transmission (based on epidemiological investigation, patient history). The latter criterion was then used to divide participants into two main groups: homosexual transmission (MSM, homosexuals) and heterosexual transmission (MSWo, heterosexuals). The factors were evaluated as follows.

The immunological and virological efficacy of ART was based on the latest results of CD4 cell count and viral load; early ART initiation was based on clinical stage at the time of diagnosis; signing up for observation

after diagnosis; time spent on ART to find the connection between ART duration and adherence; the latter was evaluated by ART initiation, continuation of ART, treatment discontinuation and deaths. Finally, the last three factors served as the basis for a Kaplan-Meier estimator to display the survival function and a log-rank test for group comparison between MSM and heterosexuals on ART, using JASP and Microsoft Office Excel. A Kaplan-Meier survival analysis was conducted to compare survival outcomes between MSM and heterosexual men who received ART but stopped taking medication, died whilst on ART, or were still on ongoing ART. As an outcome of interest, death on ART was chosen. A group of discontinuations of ART has been isolated and evaluated, since the latter has been indicated as a risk factor for opportunistic infections and death by a Working group of the NIH office of AIDS research advisory council [12]. The method of survival prediction has been chosen as among the most frequently used tools to assess and interpret data [13]. The study had acquired approval of the Healthcare of Kyrgyzstan Journal ethics committee (No. 2, 14/04/2025). When reporting on research involving human participants, the authors state that the study was conducted in accordance with the principles of the Declaration of Helsinki [14]. CDC's Epi Info software and JASP had been used for statistical analysis of confidence interval, odds ratio, p-value.

Results

A total of 8,535 men were diagnosed with HIV; 3,766 cases were accounted for bloodborne transmission (44.1%), 3,651 (42.8%) – heterosexual transmission, 653 – via homosexual intercourse (7.7%) and 464 (5.4%) – undefined route of transmission (Fig. 1). Throughout the past five years, the proportion of sexual transmission among new cases has increased to 81-91.1%, while injection transmission has plummeted from 12.6% to 1.9% – likely due to policy reforms towards public health approach among people who inject drugs and stricter medical safety protocols.

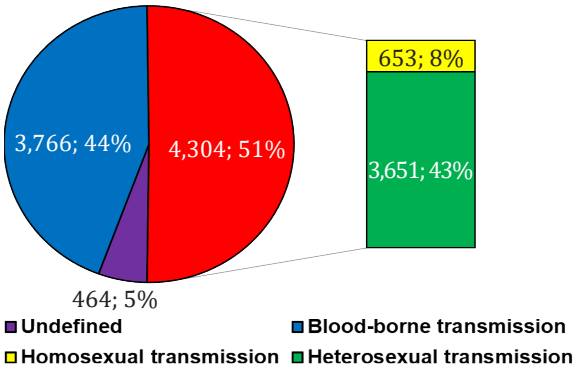

Figure 1. Distribution of people living with HIV by transmission among men, N = 8,535

Source: Republican centre for the control of blood-borne viral hepatitis and HIV [4]

A total of 4,304 participants were included, comprising 3,651 heterosexual men and 653 MSM, out of which 3,145 heterosexuals and 595 MSM which initiated ART went on to be included into the main database. Among MSM, the proportion retained in care was higher than among heterosexual men (74.9%; 95% CI 71.4-78.1 vs. 61.3%; 95% CI 59.7-62.9; $p < 0.001$). It was found that heterosexual individuals had significantly lower median CD4 counts at diagnosis (292 vs 450 cells/μL). Among MSM, the proportion receiving ART was higher than among heterosexual men (72.6%, 95% CI: 69.1-75.9 vs. 55.9%, 95% CI: 54.3-57.5; $p < 0.001$) (Fig. 2).

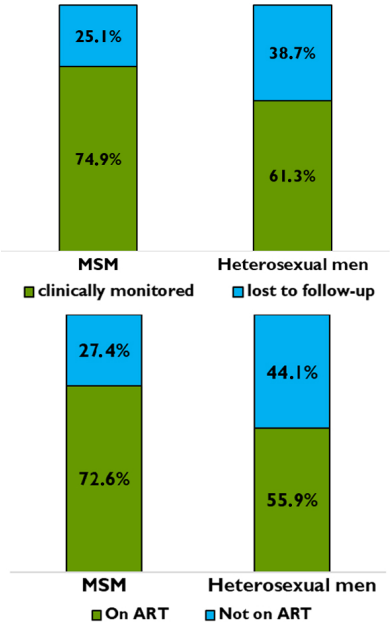

Figure 2. Proportions of men under clinical observation

Source: Republican centre for the control of blood-borne viral hepatitis and HIV [4]

The clinical stage at the first clinic admission was evaluated according to WHO recommendations [15]. In general, 9.4% (37) of cases among MSM were accounted for by the advanced stage of HIV (stages 3-4), including 1.8% for AIDS. In heterosexuals, these numbers were significantly higher and accounted for 30.7% (533) and 8.4%. To evaluate how the initial clinical stage diagnosis had been changing over time, the participants in each group were divided into three groups depending on the time passed after the ART initiation, as shown in Figure 3. Based on pooled data, regardless of ART duration, heterosexual men were more frequently diagnosed at an advanced stage of HIV (stage 3-4) than MSM: 28.8% (95% CI 26.8-30.9%) vs. 8.8% (95% CI 6.4-11.9%); $p < 0.001$ possibly due to earlier initial diagnosis as compared to the male heterosexual population (Fig. 3). Another trend shows that more patients were admitted in the early stages of HIV (1-2) – that number prevails among MSM rather than heterosexuals.

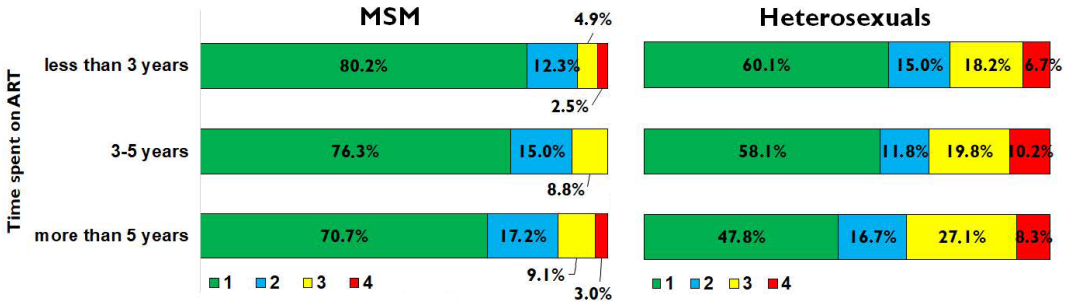

Figure 3. Clinical stage at diagnosis and time of ART initiation
Source: Republican centre for the control of blood-borne viral hepatitis and HIV [4]

Among PLHIV on ART for less than 3 years, the viral suppression rate was higher in MSM than in heterosexual men (80.7%; 95% CI 75.2-85.1 vs. 66.1%; 95% CI 63.1-69.0; $p < 0.001$). With longer ART duration the suppression rates converged and the differences were not statistically significant (3-5 years: 95.0% vs. 90.7%, $p = 0.27$; more than 5 years: 96.0% vs. 91.3%, $p = 0.16$) (Fig. 4).

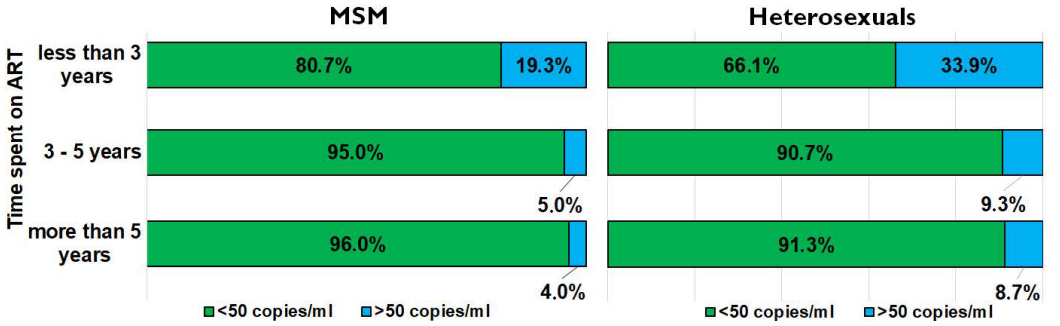

Figure 4. Viral suppression according to ART duration
Source: Republican centre for the control of blood-borne viral hepatitis and HIV [4]

Within the first three years of observation, MSM showed higher proportions of individuals with a CD4 cell count of > 200 cells/mm^3 (90.9%) as opposed to 77.5% of heterosexuals ($p < 0.001$, CI 1.84-4.63). Within 3-5 years of ART, heterosexuals showed a marked increase in this variable, reaching 91.7% (95% CI 88.1-94.3%), yet still fell behind MSM, all of whom (100%, 95% CI 95.4-100%) reached minimal immunological response [9]. Although a drop of 1% was seen in MSM of more than 5 years of ART, it still exceeded the proportion of heterosexual participants insignificantly ($p < 0.227$, CI 0.51-29.14). As shown in Figure 5, immune reconstitution followed a trend similar to virological efficacy; a larger number of patients with a CD4 cell count of >200 cells/mm^3 were associated with a longer duration of ART.

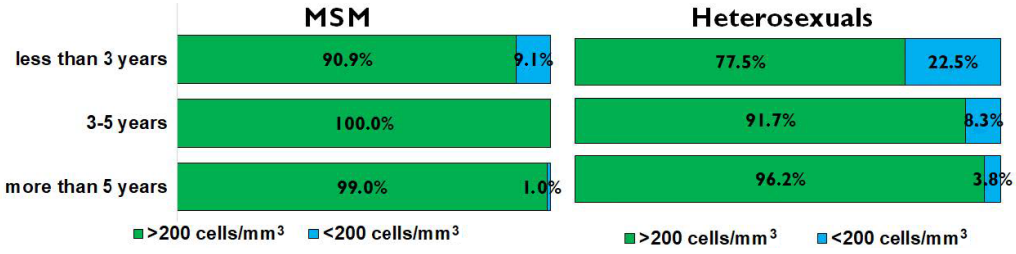

Figure 5. Immunological efficacy of ART
Source: Republican centre for the control of blood-borne viral hepatitis and HIV [4]

During the observation period, 557 deaths were recorded among heterosexual men (30.2%) and 14 among MSM (13.6%). The mean survival time was significantly higher among MSM (9.6 years) compared to heterosexual men (8.3 years) ($p < 0.001$, CI > 95% 9.2-9.6). The log-rank (Mantel-Haenszel) test showed a statistically significant difference between the survival curves ($\chi^2 = 59.770$, df = 1, $p < 0.001$), indicating improved survival among MSM (Table 1).

Table 1. Kaplan-Meier summary table and tests

A. Kaplan-Meier survival estimates							
Strata	**N**	**Events**	**Restricted mean**	**Standard error**	**Median survival**	**95% CI**	
						Lower	**Upper**
Group = Heterosexual	3,145	557	8.283	0.059	9.440	9.230	9.630
Group = MSM	595	14	9.639	0.091	-	-	-
B. Log-rank test							
Test	**χ^2**		**df**		**p-value**		
Log-rank (Mantel-Haenszel)	59.770		1		< 0.001		

Source: developed by the authors on JASP software

These findings suggest that MSM on ART had a lower mortality rate and better long-term survival compared to heterosexual men, potentially reflecting differences in health-seeking behaviour, treatment adherence, or baseline clinical status. Figure 6 is a visualisation of the survival probability curve, which demonstrates the gradual decline in survival probability for heterosexuals.

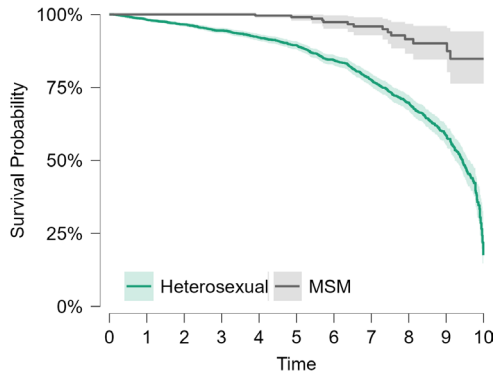

Figure 6. Kaplan-Meier's survival curve
Source: developed by the authors based on JASP software

Overall, MSM demonstrated better outcomes across the HIV care continuum, including earlier diagnosis, higher ART coverage, better retention in care, stronger viral suppression, and improved survival. In contrast, heterosexual men were more often diagnosed at advanced stages and had lower baseline CD4 counts. These findings highlight the need to strengthen early testing, timely ART initiation, and retention in care among heterosexual men.

Discussion

The gap between two groups concerning the percentage of PLHIV seeking medical help suggests that MSM are more likely to accept their HIV status, as many individuals of heterosexual background struggle to accept their diagnosis and avoid any clinical intervention because of stigma. The lower immunological effectiveness of heterosexual men indicates delayed acceptance and clinical intervention compared to MSM. This can be attributed to the fact that well-established doctor-patient relationships are present within the MSM community, which is different from the isolation experienced by those in the heterosexual community, which coincides with the wider HIV testing approach [13,18]. The prevalence of HIV positive men, including those with a high viral load, with the low survival probability as compared to women, the growth of HIV incidence in the male population is a research gap, especially among the general population, which does not receive such extensive support of NGOs and other communities and often are neglected. S. Herbert *et al*. [16] explicitly noted that heterosexuals living with HIV face "additional HIV stigma" and challenges because existing services are perceived as being tailored to gay men. Although the high levels of stigma are recognised in MSM patients, L. Nafisah *et al*. [17] pointed out that there was a substantial number of participants (63.16%) who were willing to disclose their HIV infection to health professionals.

Y. Tao *et al*. [19] stated that in terms of delayed ART initiation the MSM community often benefits from targeted outreach and peer-driven models that enforce earlier diagnosis and treatment, which are prerequisites for superior virological outcomes. Similar trends were observed in the results, demonstrating the immunological efficacy of ART [20]. S. MacCarthy *et al*. [21] investigated the factors associated with late presentation, defined as having an initial CD4 count <350 cells/mm^3, among a sample of 740 HIV-positive men in Northeast Brazil. The study found that men who self-identified as heterosexual had 1.54 times higher odds of late presentation compared to those identifying as homosexual or bisexual. Late presentation is a primary driver of low survival rates, and by proving that heterosexual identity is a risk factor for delayed care, the authors confirm the demographic's clinical vulnerability, which would need further research of factors for such a presentation.

As confirmed by the World Health Organisation [22] and U.S. Department of Health and Human Services [23], late presentation is followed by severe consequences such as opportunistic infections, that lowers life expectancy in these groups. Drug dependence and heightened anxiety were found to be the most important predictors of lower ART adherence among adult HIV-positive heterosexual men that impair psychosocial and cognitive functioning critical to optimal ART adherence, as explored in a retrospective cohort study by C. Smiley *et al*. [24]. According to the authors, life expectancy trends among 30,688 adults living with

HIV who initiated antiretroviral therapy between 2003 and 2017 across seven countries in Latin America and the Caribbean. Using the Chiang method of abridged life tables, the authors estimated the additional years of life a 20-year-old could expect to live, stratifying the results by demographic and clinical factors.

The study revealed that while overall life expectancy significantly improved and began to approach that of the general population, disparities persisted based on sex and HIV transmission risk factor. The results obtained suggested that heterosexual men consistently associate with the lowest survival outcomes compared to other groups. Specifically, at all sites except Haiti, the study demonstrated that higher life expectancy was maintained among women and men who have sex with men (MSM) compared to heterosexual males across all calendar eras. In Haiti, the gender gap was equally pronounced, with 20-year-old women on ART reaching a life expectancy of 65.3 years compared to only 56.0 years for men.

C. Smiley *et al*. [24] noted that nearly half of the study population-initiated ART with advanced disease (CD4 <200 cells/μL), a trend that remained stable over time and acted as a primary driver of premature mortality. The conclusions of C. Smiley *et al*. [24] confirmed that heterosexual men remain a vulnerable population in the region. This position is justified because the data proves that simply making ART available is insufficient to close the survival gap if social inequalities, late presentation, and specific male-centric barriers prevent heterosexual men from achieving the same longevity as MSM. The data from Rio de Janeiro reveals a survival disadvantage for cisgender MSWo and those of unknown sexual orientation. While MSM achieved the lowest mortality rate (15.1 per 1,000 person-years), the rate for MSWo was significantly higher at 24.5, and the rate for Munk surged to 82.4 per 1,000 person-years. These clinical failures are fundamentally linked to late presentation; MSWo entered care with the lowest median CD4 counts (208 cells/mm^3) and the highest prevalence of tuberculosis at enrollment (24.7%).

Men may hide their sexual history or HIV status to avoid the stigma and discrimination prevalent in conservative social contexts that are very similar to those of the traditional Kyrgyz society. The "Munk" category represent the most vulnerable heterosexual-identifying men. Their poor survival-with a one-year survival probability of only 78% is attributed to advanced disease at the time of cohort entry, which often prevents clinicians from registering a full history before death occurs. This "clinical invisibility" mirrors findings from conversation history, where heterosexual men in the United States and Brazil were identified as the group most likely to be diagnosed five years or more after infection. The sources suggest that hegemonic masculinity is a primary factor of these low outcomes. In many societies, heteronormative norms associate manhood with "feelings of invulnerability", leading to a denial of health information, a lack of self-care, and the avoidance of testing. Surprisingly, despite facing extreme social violence and structural barriers, transgender women in the Brazilian study achieved the second-lowest mortality rate, which is attributed to tailored interventions, such as gender-neutral spaces, specialised staff, and community engagement.

With that being said, MSM in Kyrgyzstan, are often provided special HIV services [25]. The population-based study by D. Yuan *et al*. [26] conducted in the Liangshan Yi Autonomous Prefecture, China, among the list of factors identifies being male as an increased risk of virological failure and heterosexual behaviour was a major determinant for the failure of antiretroviral therapy. Patients at the clinical stage of AIDS had a 1.35 times higher risk of virological failure, which aligns with the results section of this very research. The study identifies higher education and duration on ART (≥12 months) as factors that lower the likelihood of failure. According to Y. Ge *et al*. [27] men with heterosexual transmission in the cohort in China were significantly older and had lower baseline CD4+ counts than MSM, reinforcing the "late presentation" theme. The authors suggest that the transmitted founder (TF) viruses in heterosexual transmission may have higher fitness and virulence, causing more severe initial immune damage that is harder to reverse even with effective therapy.

Men who have sex with men, along with other key groups in Kyrgyzstan, were often beneficiaries of non-governmental organisations that frequently provided services related to sexual, reproductive and mental health; they are also known to form communities as a support system and the source of awareness, which suggests the positive impact on 95-95-95 cascade despite social stigma and discrimination. The latter itself can be a cause of belated testing and diagnosis, lower adherence to ART and treatment efficacy in the general male population. It is suggested that this study has yet to encourage further research on the implementation problem in the general population as a psychosocial, behavioural study. As a result, it would help apply methods of HIV service improvement similar to those in key population groups.

This contrast justifies the position that the poor outcomes for heterosexual men are not inevitable but are a result of being "left out of HIV prevention and care policies". While MSM and transgender populations have benefited from targeted advocacy, heterosexual men remain underserved, trapped by social determinants and a lack of male-friendly service models. The study of Ch. Jumalieva *et al*. [5] indicated a significant increase in awareness of their HIV status among MSM in Bishkek: 72.6% of participants reported having been tested for HIV in the past 12 months. By comparison, according to the 2016 study, 30.4% of MSM in Bishkek reported having been tested in the past year. More than

half (59.3%) were tested at NGOs and about a quarter at AIDS centres, indicating improved access and greater trust among MSM in the non-governmental sector. Early and frequent testing could explain the gap in timely diagnosis at the early stage of infection between MSM and heterosexual men. Among MSM who know their HIV status, high ART coverage was noted (92.7%), and the proportion of MSM/people living with HIV with viral suppression was 85.2%.

Conclusions

The data showed clear differences in clinical pathways between men who have sex with men and heterosexual men. The cohort analysis indicates that MSM had better adherence to antiretroviral therapy. They were more open to clinical observation and showed greater consistency in starting and maintaining treatment. These behaviour patterns align with the clinical presentation: MSM typically sought care at an earlier disease stage, while heterosexual men often showed up with more advanced opportunistic infections. As a result, these differences led to significant outcomes; MSM had higher rates of viral suppression and better immune recovery (CD4+ >200 cells/mm^3).

Overall, these findings suggest that in this study population, the MSM group experienced more positive treatment outcomes and better survival chances, likely due to more proactive health-seeking behaviours and earlier access to diagnostic services, thus showing a strong association between routes of transmission and clinical outcomes. As the study results suggest, people who are not included in key groups and belong to the general population may actually be more at risk and more vulnerable to the unfavourable outcomes of AIDS. That implies that the focus shifted towards vulnerable groups may have left heterosexual men neglected. Implementation studies should be conducted in the future to evaluate the key factors influencing outcomes, including psychological and societal aspects, with particular attention to participants' psychological well-being, as stigma is often reinforced by these factors. Such studies are also necessary because, although HIV interventions in the Kyrgyz Republic align with World Health Organisation recommendations, they have not yet led to the achievement of the UNAIDS 95-95-95 targets.

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Conflict of Interest

None.

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ВИЧ-позитивные мужчины: эффективность и выживаемость на антиретровирусной терапии

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Аннотация. Актуальность исследования определяется установленной распространённостью проблем среди взрослых мужчин, живущих с вирусом иммунодефицита человека в ключевых группах населения, а также более высоким риском неэффективности лечения среди мужчин общей популяции. Целью данного исследования стала оценка выживаемости гетеросексуальных мужчин и мужчин, практикующих секс с мужчинами. Было проанализировано 4 304 ВИЧ-положительных взрослых мужчины, заразившихся вирусом иммунодефицита человека половым путём: 3 651 гетеросексуал и 653 мужчины, практикующими секс с мужчинами; потребители инъекционных наркотиков (3 766) были исключены из исследования. Для оценки эффективности использовались показатели количества клеток CD4 и вирусной нагрузки, а также дополнительные данные о приверженности лечению. По сравнению с мужчинами, практикующими секс с мужчинами (МСМ) (74,9%), гетеросексуалы чаще становились на клиническое наблюдение (в 61,3% всех случаев). Мужчины общей популяции чаще терялись для последующего наблюдения и чаще диагностировались на поздних стадиях ВИЧ-инфекции – 80,2% мужчин, имеющих половые контакты с мужчинами, начавших антиретровирусную терапию в последние три года, были диагностированы на первой стадии заболевания, тогда как среди гетеросексуалов аналогичной категории этот показатель составил 60,1%. За 2023-2026 гг. вирусологическая (80,7% и 66,1% МСМ и гетеросексуалов соответственно с неопределяемой вирусной нагрузкой, $p < 0,05$) и иммунологическая эффективность у гетеросексуальных мужчин (90,9% против 77,5% соответственно с количеством клеток CD4 более 200) оказалась ниже по сравнению с мужчинами, практикующими секс с мужчинами. Кривая Каплана-Мейера показала более высокую вероятность выживания среди мужчин, имеющих половые контакты с мужчинами. Данное исследование проливает свет на роль социальной поддержки; более высокий уровень осведомленности среди мужчин, имеющих секс с мужчинами, может объяснять их лучшие результаты

Ключевые слова: гетеросексуальные мужчины; эффективность терапии; мужчины, имеющие секс с мужчинами; подавление вирусной нагрузки; анализ выживаемости

АИВ-позитивдүү эркектер: антиретровирустук терапияда натыйжалуулук жана жашап кетүү

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Корутунду. Изилдөөнүн актуалдуулугу негизги калк топторуна кирген, адамдын иммундук жетишсиздик вирусу (ВИЧ) менен жашаган бойго жеткен эркектер арасында көйгөйлөрдүн кеңири таралышы, ошондой эле жалпы калк арасындагы эркектерде дарылоонун натыйжасыз болуу коркунучунун жогору экендиги менен аныкталат. Бул изилдөөнүн максаты – гетеросексуал эркектер менен эркектер арасында жыныстык катнашта болгон эркектердин (ЭЖЭ) жашап калуу көрсөткүчтөрүн баалоо болгон. Жыныстык жол аркылуу ВИЧ жуктуруп алган 4 304 ВИЧ-позитивдүү бойго жеткендер талдоого алынган: алардын 3 651и – гетеросексуалдар, 653 – эркектер менен жыныстык катнашта болгон эркектер; инъекциялык баңгизаттарды колдонгон адамдар (3 766) изилдөөдөн чыгарылган. Натыйжалуулукту баалоо үчүн CD4 клеткаларынын саны жана вирустук жүктөмдүн көрсөткүчтөрү, ошондой эле дарылоого карамуу боюнча кошумча маалыматтар колдонулган. Эркектер менен жыныстык катнашта болгон эркектерге (74,9%) салыштырмалуу, гетеросексуалдар клиникалык байкоого көбүрөөк катталган (бардык учурлардын 61,3%ында). Жалпы эркек калкы диспансердик учеттон көбүрөөк чыгып кеткен жана ВИЧ инфекциясы өнүккөн стадияларда көбүрөөк аныкталган – акыркы үч жылда антиретровирустук терапияны баштаган MSM тобунун 80,2%ы оорунун биринчи стадиясында диагноз алышкан, ал эми ушул эле категориядагы гетеросексуалдар арасында бул көрсөткүч 60,1% болгон. Акыркы үч жыл ичинде гетеросексуал эркектердин вирусологиялык (аныкталбаган вирустук жүктөмгө жетишкендер: MSM – 80,7%, гетеросексуалдар – 66,1%) жана иммунологиялык натыйжалуулугу (CD4 клеткаларынын саны 200дөн жогору болгондор: тиешелүүлүгүнө жараша 90,9% жана 77,5%) ЭЖЭ тобуна салыштырмалуу төмөн болгон. Каплан ийри сызыгы ЭЖЭ арасында жашап калуу ыктымалдыгы жогору экендигин көрсөткөн. Бул изилдөө социалдык колдоо маселесине жарык чачат; эркектер менен жыныстык катнашта болгон эркектердин арасындагы маалымдуулуктун жогору болушу алардын жакшыраак натыйжаларга жетишин түшүндүрүшү мүмкүн

Негизги сөздөр: гетеросексуалдык эркектер; дарылоонун натыйжасы; эффективдүүлүк; жашап калуу; эркектер менен жыныстык катнашта болгон эркектер