



# THE SUMMARY FINDINGS OF OPERATIONAL RESEARCH FOCUSING ON BISEXUAL MEN AND THEIR FEMALE PARTNERS IN UKRAINE

**Authors:** Maksym Kasyanchuk, Genadij Korzhov, Maryna Varban

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## Foreword

In the context of HIV and AIDS prevention, the relevant regulatory framework of Ukraine recognizes men having sex with men (MSM) as one of the key vulnerable groups<sup>1</sup>. However, despite the existing evidence suggesting that a significant percentage of MSM are or had been in a heterosexual marriage (5%)<sup>2</sup> or practice sex with women (25% of all MSM report having had sex with women in the last six months prior to the survey), until this point in time, Ukraine has offered no specially designed programs to target the needs of bisexual men and their female partners — even though the currently operating HIV prevention programs, as well as the programs that offer treatment, care, and support to HIV-positive people are largely structured and designed in a standard format that services broadly defined client groups including MSM.

The UNAIDS Best Practices suggest that social support should focus not only on key vulnerable groups, but also on “issues concerning other affected populations (wives, female sex partners and families)”<sup>3</sup>.

Bisexual men are objects of fear and blame in an era of AIDS. They are not only considered secretive and promiscuous fence sitters, they are also condemned as risking women’s lives because they have sex with men and women<sup>4</sup>.

A recent ethnographic study focusing on MSM<sup>5</sup> reveals that

married MSM tend to organize their family relationships on different foundations. In some cases, such relationships are nothing but a sham maintained by the couples for appearance's sake (the spouses do not even reside together), while, in some other cases, the MSM respondents and their wives live together making an effort to keep the man’s sexual preferences a secret from the external social environment. Even after coming out, relationships between fathers (MSM) and their children tend to continue. In terms of HIV/AIDS concerns, some respondents point out an interesting risk reduction strategy — choosing to have sex with potential partners who appear ‘clean’ [‘legit’]; MSM with a wife and children, a ‘good’ social status, etc. fall into this category. The study findings identified some cases where condom use was reported only for having sex with men, while no condom use was reported for having sex with women.

Thus, it would be helpful and appropriate to conduct research into bisexual behaviors among MSM and study the question in greater depth. Is it correct to regard bisexual men as a bridge group? If so, what can be done to better protect these men, their female spouses, and partners against exposure to the virus? These are the key questions of this research project that incorporates a review of foreign and domestic research findings, in-depth interview data, and a questionnaire-based survey that polls bisexual men and their female spouses in five cities of Ukraine.

The research was conducted during the year ended December 31, 2013.

<sup>1</sup> The State Program to Ensure HIV Prevention, Treatment, Care, and Support to HIV-Positive People and Patients with AIDS for Years 2009-2013 2009-2013.

<sup>2</sup> Bio-Behavioral Survey “Behavior Monitoring and HIV-Prevalence Among Men Who Have Sex With Men as a Component of Second Generation Surveillance” [Analytical Report] 2011 / E.S. Bol'shov, M.G. Kasyanchuk, E.B. Leschinsky, L.V. Trofimenko, I.A. Schwab — K. ICF “International HIV/AIDS Alliance in Ukraine”, 2012. — 104 p.

<sup>3</sup> HIV and Men Who Have Sex with Men in Asia and the Pacific. — UNADS, 2006. — p.22.

<sup>4</sup> Worth H. Is the Myth of the Bisexual Infector Still a Myth? Reflexions on HIV Risk and Men Who Have Sex with Men and Women // J. Bisex. — 2011. — Vol. 11. — p. 488-492.

<sup>5</sup> A. Trofimenko, M. Varban, M. Debelyuk, Summary of Operational Research Findings ‘Ethnographic Study of the Lifestyle and Key Behavior Models of MSM in Three Cities of Ukraine: Kyiv, Donetsk, and Chernovtsy’. — K., 2013. — 28 p. Downloadable at: [http://www.aidsalliance.org.ua/ru/library/our/2013/msm\\_ua.pdf](http://www.aidsalliance.org.ua/ru/library/our/2013/msm_ua.pdf)

## Research Methodology

This study project is designed as a cross-sectional survey. Over half of the sample of respondents were interviewed using a standardized questionnaire, while the rest [less than half] of the sample were surveyed through an in-depth interview.

The **survey sample** included residents from Zaporizhzhya, Odesa, Kyiv Kharkiv, and Chernivtsi. Overall, 80 men and 20 women were polled in each of the cities using a survey questionnaire, while another 40 in-depth interviews were conducted and recorded to collect responses from other male and female survey participants. In total, 403<sup>6</sup> completed questionnaires were obtained from bisexual men, and 101 — from their female partners.

Sampling was focused not on strictly predefined socio-demographic characteristics, but on consistency and compliance with the *inclusion criteria* described below:

- For male respondents — having had sexual contact with male and female partners in the course of the last six months prior to the survey, being over 16 years of age, residence in one of the five regions covered by the survey, verbal informed consent;
- For female respondents — having had sexual contact with male respondents [MSM] in the course of the last six months prior to the survey, being over 16 years of age, verbal informed consent.

*The sample was not randomly selected (“snowball sampling”).*

Seed respondents in snowball sampling were clients of local MSM and LGBT organizations, their acquaintances and friends. Only the female partners of bisexual men who were aware of their partners’ bisexual preferences were recruited for the survey.

Each respondent received a remuneration [compensation] for participation in the survey. A respondent who recruited another survey subject was offered additional compensation.

The interviews or questionnaire-based surveys were administered in the language preferred by the respondent [Ukrainian or Russian].

### The research questions were as follows:

- What types of bisexuals are there (in particular, based on the status of marital relationship)?
- How do respondents seek out sexual partners?
- What is their motivation for sexual contact with men and women?
- What are the basic needs of bisexual clients and their female partners in terms of HIV prevention services?
- Are there any special ways in which bisexual men self-identify themselves?
- How do women express their attitudes toward relationships with bisexual men?
- What are the risk factors for women and bisexual men [MSM] in terms of infection risks?
- What types of prevention strategies and activities can be effective in regards to bisexual clients?

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<sup>6</sup> In addition to the cities mentioned above, two bisexual men and the female partner of one of them were interviewed in Donetsk, as well as another MSM in Uzhgorod.

### Key Assumptions:

- The social-psychological characteristics, values, and motivational beliefs of bisexual men [MSM] represent factors that drive risky behavior (in terms of transmission of HIV and STI from MSM to the general population):
  - ✓ level of homophobia associated with a lack of communication between the partners (partner communication progressively deteriorates as the level of homophobia in a household goes up);
  - ✓ level of homophobia associated with high-risk behaviors (higher levels of homophobia are correlated with a progressively increasing number of sexual partners over a period of time, driving down the probability of relationships with a regular partner and the average length of a relationship with a regular partner, etc.);
  - ✓ risk orientation ('Security' and 'Stimulation' indices in the Schwartz Value Inventory and corresponding lines on the semantic differential scale [table]) is associated with risky sexual behavior;
  - ✓ hedonism orientation ('Hedonism' index in the Schwartz Value Inventory and corresponding lines on the semantic differential scale [table]) is associated with involvement with multiple sexual partners (both male and female), none or short-duration regular partnerships, unprotected sex, alcohol consumption, etc.;
  - ✓ conformity orientation ('Security', 'Conformity', 'Tradition', 'Self-Direction' indices in the Schwartz Value Inventory and corresponding lines on the semantic differential scale [table]) is associated with
    - higher levels of internalized homophobia, being in a marriage and having children, non-use of condoms during sex with the female spouse;
- The nature of relationship within the couple represents risk factors for female partners of MSM in terms of transmission of HIV and STI:
  - ✓ lack of awareness and communication within the couple with regard to the bisexual partner's sexual preferences and behavior practices;
  - ✓ risk orientation ('Security' and 'Stimulation' indices in the Schwartz Value Inventory and corresponding lines on the semantic differential scale [table]) is associated with risky sexual behavior;
  - ✓ acceptance of non-monogamous relationships is correlated with low levels of satisfaction with living in a marriage, orientation toward hedonism, the myth that the male partner must be the one to suggest [bring up] using protection (use of male or female condoms), etc.;
- Specific peculiarities associated with sexual orientation and identity represent barriers to access to HIV prevention services:
  - ✓ level of homophobia;
  - ✓ low awareness and knowledge of the routes of transmission of HIV, use of condoms during sex with male or female sexual partners, the myths regarding condom use (e.g., one of them is that condoms reduce sensitivity);
  - ✓ traditional mentality and attempts to prevent disclosure of bisexual identity or experience;

- ✓ lack of knowledge of relevant service providers notably accounts for the low level of service coverage.

**Data Analysis, Quality Control.** The survey organizer on site provided weekly reports to the project administrator on the progress of the fieldwork on the ground. Research team members made monitoring visits as required.

Once finished, each regional coordinator examined the completed questionnaires and entered them into a database with pre-programmed conditions that screen out data inconsistent with possible response options, as well as the rules that define logic transitions. Accuracy control was performed by checking 10% of the randomly selected paper-based questionnaire forms against the resultant body of research data.

Audio recordings of in-depth interviews were duly transcribed. Analysis of scripts was conducted based on a 'tight description' (the analyst condensed and summarized large semantic units of text [one–two paragraphs] into fragments of one-two sentences, and then the description was analyzed for compliance with the preset indicators).

Structured interviews were examined using single and multivariate analysis, such as regression analysis (generalized linear models that do not require normal distribution of variables; binary logistic regression), factorial analysis, etc. based on freely available statistical software [R]:

- `factanal(X, factors)` — for factorial analysis;
- `glm(model, family=poisson)` — for linear models;

- `glm(model, family=binary)` — for binary models;
- `step(model, direction='backward')` — for data selection,

where X is a data table, factors — multiple factors, model — a regression equation that ties together the value of a dependent variable with independent variables.

**Ethical research guidelines** were based upon the Professional Code of Ethics adopted by the Ukrainian Sociological Association and the Declaration of Helsinki — Ethical Principles for Medical Research. Ethical guidelines applied during the analysis and processing of collected quantitative data were in compliance with the requirements set forth in the Handbook of Ethics in Quantitative Methodology<sup>7</sup>.

Prior to the interview, each respondent was informed about the objectives of the study, assured of anonymity and confidentiality, advised of their right to refuse to participate, etc. The interviewer signed his or her name on the questionnaire form to certify the respondent's verbal informed consent. Interviews were conducted on a face-to-face basis. All data were stored securely and confidentially, and, among other privacy protection arrangements, research team representatives did not keep a record of interviewees' names and other personally identifiable information.

The research protocol and instruments passed a review by an expert panel and the professional ethics board issued a positive report in due course.

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<sup>7</sup> Panter A.T. Handbook of Ethics in Quantitative Methodology / A.T. Panter, S.K. Sterba. — Routledge, 2011. — 540 p.

## KEY RESEARCH FINDINGS

1. The average **age** of the sample participants: 30 years — for bisexual men, 29 years — for female partners of bisexual men.

2. Slightly less than a third of all respondents among bisexual men (29%) and a quarter of their female partners (25%) have **children**.

3. 64% of all bisexual men interviewed have a **regular male or female partner**: 38% have one male partner, 30% — one female partner.

4. Three quarters of the female partners of bisexual men (75%) have one or several **regular male partners**.

5. The average **length of relationships** between the bisexual men and their male/ female partners is three years, while the same figure for women and their bisexual male partners is four years.

6. Bisexual male respondents report having had an average of three male sexual partners and two female partners over the last six months prior to the survey, whilst the women have averaged three sexual male partners in that time frame.

7. Based on the research findings, the men who have had sex with partners of both genders in the last month prior to the survey were distributed as follows:

- The sexual behavior of 54% of such respondents can be considered completely safe in terms of HIV prevention (i.e. using protection is reported during sex with both male and female partners during each and every sexual encounter);

- The sexual behavior of 20% of such respondents can be considered partially safe [up to a point] (i.e. using protection is reported during every sexual encounter with male partners, but not during sex with female partners, or during every sexual encounter with female partners, but not during sex with male partners);
- The sexual behavior of 26% of such respondents is completely unsafe (condom use is sporadic or non-existent with both male and female partners):

8. The portions of bisexual men who reported **male or female condom use the last time they had sexual intercourse** (a percentage of the respondents who reported having engaged in the relevant type of sexual activity over the last six-month period) were as follows:

- 1) 86% reported the use of a condom the last time they had anal sex with a male partner;
- 2) 82% reported the use of a condom the last time they had anal sex with a female partner
- 3) 76% reported the use of a condom the last time they had vaginal sex.

9. Over the last six months, 40% of the female partners of bisexual men have had **receptive** anal sex, whilst 83% of all female participants who report having engaged in this type of sexual activity confirm use of male or female condoms the last time they had anal sex.

10. Based on the research findings, over the last six months, roughly a third of all bisexual men interviewed have engaged in **group sex** (with the number of male/ female partners involved being three or more).

11. Based on the research findings, over the last six months, roughly a sixth of all bisexual men and 17% of all women interviewed have engaged in **swinging** activities (swapping of regular male or female partners with other couples).

12. A vast majority of all bisexual men interviewed (84%) and their female partners (81%) report having **used alcohol**.

13. Two thirds of all bisexual men interviewed, who report having consumed alcohol and had sex during the last month at least on one occasion, claim to have engaged in sexual intercourse (with both male and female sexual partners) in a state of alcohol intoxication.

14. 33% of all male respondents interviewed agree with the statement, "Alcohol helps me meet male partners for sex". Thus, a third of bisexual men think alcohol acts as a 'social lubricant'.

15. 60% all bisexual men interviewed have correctly responded to the **five basic questions regarding the major routes of transmission of HIV**.

16. Based on the overall scores, the female respondents interviewed tend to have somewhat greater basic knowledge of HIV/ AIDS than the male survey participants. However, in terms of statistically significant results, bisexual men and their female partners do not differ in this regard.

17. The research findings reveal the following beliefs shared by bisexual men that represent **factors associated with risky sexual behavior**:

- 1) 16% agree that condom use is required only during commercial sex;
- 2) 25% believe condom use is a sign of distrust existing between partners;
- 3) nearly a fifth of all respondents from this group (19%) believe condom use is optional in cases when condoms do not provide 100% protection against infections;
- 4) 13% believe condom use is humiliating for a man.

18. **18%** of all male and female respondents interviewed **have never tested for HIV**.

19. According to the interpretation of the research findings, 8% of all bisexual men interviewed and 6% of their female partners might be **HIV-positive** (based on the total responses reporting positive HIV status and refusals to respond).

20. Both male and female respondents, when describing themselves as a partner, consistently attempt to **shift responsibility** for unsafe sex to the other partner.

21. Based on the regression analysis, it can be concluded that the key factors associated with risky sexual behavior among bisexual men are as follows:

- 1) being in a marriage (compared to all other respondents, married respondents were five times more likely to report using male or female condoms the last time they had anal sex with a male partner);
- 2) swinging experience (compared to all other respondents, such male respondents were four times more likely to report using protection the last time they had anal sex with a male partner);
- 3) having children (male respondents with children were only half as likely to report using male or female condoms during each and every sexual encounter with both men and women over the course of the previous month).

22. Based on the regression analysis, the key factors associated with risky sexual behavior among the female partners of bisexual men are as follows:

- 1) family [marital] status of female respondents (compared to unmarried survey participants, married or divorced women were five times less likely to report using safe sex practices);
- 2) basic knowledge of HIV/ AIDS (female respondents who correctly responded to the five basic questions regarding the major routes of transmission of HIV were

five times more likely to report using protection the last time they had vaginal sex with a male partner);

- 3) self-description as a person who: (1) has numerous sexual partners among men, (2) cares about her personal safety every time she has sex, (3) in most cases, does like the others do [follows the crowd], — such women were more likely to report using protection the last time they had sex.

23. The vast majority of bisexual men agree with the following statements:

- 1) *“Sex between men is frowned upon and condemned in our society, so it must be kept secret”* (87%);
- 2) *“Some people I know judge me negatively because of my sexual behavior”* (81%).

24. **HIV prevention services** cover<sup>8</sup> half (49%) of all bisexual men interviewed and slightly less than half (43%) of their female partners. In the case of male respondents, estimates of service coverage might be inaccurate, because the survey sample was developed through MSM-oriented service organizations. However, in terms of HIV prevention concerns, these data point to the fact that service coverage for MSM can be potentially twice as high.

25. Slightly more than half of all bisexual men interviewed (56%) claim to know about non-governmental or charitable organizations in their cities that offer HIV prevention services, as well as care and support for PLWHA.

26. Half (54%) of all bisexual men interviewed who know about HIV service organizations are their **clients**.

27. Slightly less half (42%) of all female respondents interviewed who know about HIV service organizations are their clients.

28. Based on the research findings, bisexual men tend to seek and develop regular, stable, and predictable relationships with their male and female partners.

29. Based on the data presented, the following conclusions can be drawn:

- 1) **The female partners of bisexual men [MSM] are a group at risk;**
- 2) **Bisexual men act as a bridge** for transmission of HIV and STI from homosexual males to heterosexual females and vice versa;
- 3) The first study done in the former USSR territory with the focus on bisexual men and their female partners reveals highly complex linkages between behavioral (in terms of HIV risks), social, and psychological factors.
- 4) In terms of HIV prevention efforts, service coverage reaches relevant female partners who are aware of their men’s sexual orientations and (homo)sexual behaviors even when there is no program in place to address their specific needs. However, which is most likely, this conclusion does not apply to the female partners of bisexual men [MSM], who are completely unaware of their men’s homosexual behaviors.

<sup>8</sup> Clients are considered as being reached by HIV prevention services if they have received free condoms in the last twelve-month period and know where to be tested for HIV.

## KEY RECOMMENDATIONS

Stringent privacy protection policies and procedures in HIV service organizations [NGOs] be developed and implemented (fear of disclosure is one of the most frequently cited barriers).

A comprehensive PR-strategy at the level of local HIV service organizations be developed and implemented aiming at disseminating information specifically tailored for key target groups with regard to the relevant organization and its services, efforts be stepped up to reduce social stigma and discrimination associated with the organization's activities and clients (low awareness of services offered, a biased perception of this and other issues is a source of concern for potential clients).

Programs be developed and implemented to increase assertiveness in bisexual men, reduce internalized homophobia, and improve communication with female partners (if the man is a client of HIV prevention services

and open for dialogue, his female partner will be receiving services indirectly in any case). Specifically, the following steps are recommended:

- to include discussions of issues relating to bisexuality in a non-judgmental atmosphere in self-help group activities;
- to pilot programs for female partners of bisexual men and different-sex couples where the male partner is bisexual;
- to pilot programs to facilitate communication in same- and different-sex partnerships where the male partner is bisexual.

The possibility be explored of measuring homophobia within the framework of regular monitoring reviews to track knowledge levels and behaviors among MSM as a component of second-generation HIV [epidemiological] surveillance (homophobia is a major predictor of risky behavior).

## Exhibits

### Marital Status of MSM Disaggregated by Risky Sexual Behavior, %

Marital Status	Men with...		
	Completely Safe Behavior, <i>N = 194 Persons</i>	Partially Safe Behavior, <i>N = 70 Persons</i>	Completely Unsafe Behavior, <i>N = 94 Persons</i>
Never Married	72	53	52
Married	15	32	22
Divorced or Widowed	14	15	26

### Percentage of Correct Responses by Bisexual Male Respondents to Test Questions That Measure Basic Knowledge of HIV/ AIDS (In Decreasing Order), %

Statement	<i>N = 403 Persons</i>
HIV can be contracted from sharing injecting equipment [syringes] (correct answer — 'YES')	98
HIV can be contracted from unprotected anal sex (correct answer — 'YES')	95
Using condoms consistently and correctly during each sexual contact reduces the risk of HIV transmission (correct answer — 'YES')	93
HIV can be contracted from unprotected vaginal sex (correct answer — 'YES')	92
An HIV infected person may show no outward signs of infection (correct answer — 'YES')	86
HIV can be contracted from sharing a glass with an infected person (correct answer — 'NO')	86
HIV can be transmitted from an infected mother to her child during labor and delivery (correct answer — 'YES')	85
HIV can be contracted from using the same toilet seat as someone who is infected, or it can be transmitted through swimming pools or saunas (correct answer — 'NO')	81
HIV can be transmitted through a mosquito bite (correct answer — 'NO')	79
HIV can be transmitted from an infected mother to her child during breastfeeding (correct answer — 'YES')	75
HIV can be transmitted from an infected mother to her child during pregnancy (correct answer — 'YES')	73
HIV can be contracted from unprotected oral sex (correct answer — 'YES')	58

**Percentage of Correct Responses by Female Partners of Bisexual Male Respondents to Test Questions That Measure Basic Knowledge of HIV/ AIDS (In Decreasing Order), %**

Statement	<i>N = 101 Persons</i>
HIV can be contracted from unprotected vaginal sex (correct answer — ‘YES’)	100
HIV can be contracted from sharing injecting equipment [syringes] (correct answer — ‘YES’)	98
Using condoms consistently and correctly during each sexual contact reduces the risk of HIV transmission (correct answer — ‘YES’)	98
HIV can be transmitted from an infected mother to her child during labor and delivery (correct answer — ‘YES’)	96
HIV can be contracted from unprotected anal sex (correct answer — ‘YES’)	95
An HIV infected person may show no outward signs of infection (correct answer — ‘YES’)	91
HIV can be transmitted from an infected mother to her child during pregnancy	84
HIV can be transmitted from an infected mother to her child during breastfeeding (correct answer — ‘YES’)	80
HIV can be contracted from using the same toilet seat as someone who is infected, or it can be transmitted through swimming pools or saunas (correct answer — ‘NO’)	79
HIV can be contracted from sharing a glass with an infected person (correct answer — ‘NO’)	78
HIV can be transmitted through a mosquito bite (correct answer — ‘NO’)	78
HIV can be contracted from unprotected oral sex (correct answer — ‘YES’)	65

**Estimates of HIV Prevalence Among Bisexual Men [MSM] and Their Female Partners Based on Self-Reported HIV Status**

Respondents Interviewed	Tested and Informed of Test Results	Agreed to Disclose Status	Test Results Announced	Overall Percentage Among Persons Tested
Male	330 persons	Yes — 274	negative — 271	82%
			positive — 3	8%
		No — 56	probably positive — 56	
Female	82 persons	Yes — 77	negative — 77	94%
			positive — 0	6%
		No — 5	probably positive — 5	

### Multivariate Analysis of Linkages Between Sexual Behavior and Risk Factors

Shown below are the results of regression analysis of the relationships between the key characteristics of safe sexual behavior among MSM (use of male or female condoms the last time respondents had anal sex with a male partner during the last six months, using protection during each and every anal and vaginal sexual encounter with male and female partners in the past month), and other factors. The factors associated with safe sexual behavior among female respondents were similarly analyzed.

**Male respondents.** Initially, the logistic equations covered the whole set of factors potentially involved, such as socio-demographic characteristics, use of alcohol and drugs, service coverage data, basic knowledge of HIV/ AIDS, internalized and externalized homophobia scales, semantic differential charts, etc. All of these were later simplified using the Backward Algorithm. Tables 1 and 2 below show the calculation results for the final models with the dependent variables 'Use of condoms the last time respondents had anal sex with a male partner during the last six months' and 'Completely safe sexual behavior (consistent use of condoms during each and every anal sexual encounter with male partners, and during each and every anal and vaginal sexual encounter with female partners in the past month)', respectively.

The key factors associated with risky sexual behavior among bisexual men include being in a marriage (married men are five times more likely to report using male or female condoms the last time they had anal sex with a male partner), swinging experience (men with such experience are four times more likely to report using protection the last time they had anal sex with a male partner); at the same time, having children is associated with more risky behavior (male respondents with children are only half as likely to report using condoms during each and every sexual encounter with both men and women over the course of the previous month).

The linkages described above can be generalized and interpreted as follows: a married man tends to perceive his female spouse (especially, if they have children) as an a priori safe part of his life, hence no need for protection (therefore, men of this category do not fall into the group where safe sex is practiced during each and every sexual intercourse with both male and female partners), while male or swinging partners are regarded as casual, distant, and unsafe, thus requiring added protection.

The assumption made is expanded and confirmed by positive relationships between use of male or female condoms during the last sexual encounter with men of traditional sexual orientation (which is not related to marital status, as the average number value on the 'Tradition' axis here does not differ from data for respondents in a marriage and the rest of the respondent pool, as well as those who have or do not have regular male or female partners), leaning closer toward agreeing with the statement on the semantic differential "I use a condom during having sex with this sexual partner, because I do not trust this partner".

In addition to the foregoing, risky sexual behavior among bisexual men is associated with the following social-psychological factors: safer sexual behavior is correlated with knowledge about the existence of HIV-focused service organizations, leaning closer toward agreeing with the statement, "I make sure to use a condom every time I have sex" and disagreeing with the common myths, e.g., that a condom is not an effective preventive measure, that the likelihood of contracting the infection through sex with one's wife or mistress is remote, etc.

Based on the research findings, it should be incidentally noted that risky sexual behavior is only weakly correlated with internalized and externalized homophobia.

Table 1

The results obtained from the logistic equation, in which the dependable variable is the question *“Please take a moment to think back over the last six months. Was a male or female condom used during the last ANAL sexual encounter you had with a MALE partner?”* (the ‘YES’ response is the event whose probability is determined based on the factors presented),  $N = 403$  persons

Factor	OR	AOR (95% CI)
<b>Marital Status (ref. = 'never married'), <math>p = 0.03</math></b>		
Married	1.3	5.1 (1.4–18)
Divorced or widowed	0.6	1.9 (0.6–6.1)
<b><i>“Please take a moment to think back over the last six months. Did you engage in partner sharing or swapping activities with your acquaintances (swinging) [involving regular male or female partners] in that time frame?”</i> (ref. = 'no'), <math>p = 0.01</math></b>		
Yes	0.8	3.8 (1.3–12)
<b><i>“Do you consume alcohol?”</i> (ref. = 'no'), <math>p = 0.14</math></b>		
Yes	1.9	2.2 (0.8–6.3)
<b><i>“Do you know about the existence of any non-governmental organizations in your area [oblast] that offer HIV prevention services?”</i> (ref. = 'no'), <math>p = 0.03</math></b>		
Yes	2.7	2.5 (1.1–6.0)
<b>Value Inventory [on a scale from 1 to 4 points]</b>		
Security, $p = 0.05$	0.9	0.6 (0.4–1.0)
Tradition, $p < 0.001$	1.5	2.2 (1.3–3.8)
<b><i>“Some people I know judge me negatively because of my sexual behavior”</i> (ref. = 'agree'), <math>p = 0.08</math></b>		
I disagree	0.8	0.5 (0.2–1.1)
<b><i>“I hide my sexual orientation from my male/ female sexual partner”</i> (ref. = 'agree'), <math>p = 0.09</math></b>		
I disagree	0.3	0.5 (0.2–1.1)
<b><i>“Condoms diminish sexual pleasure”</i> (ref. = 'disagree'), <math>p = 0.15</math></b>		
I disagree	3.3	1.8 (0.8–4.0)
<b><i>“Condom use is optional because condoms do not provide 100% protection against infections”</i> (ref. = 'agree'), <math>p &lt; 0.001</math></b>		
I disagree	7.4	4.5 (1.7–11)

<i>"Sex between men is frowned upon and condemned in our society, so it must be kept secret" (ref. = 'agree), p = 0.06</i>		
I disagree	0.7	0.4 (0.2–1.0)
<i>Score on the Semantic Differential [axis] [on a scale from 1 to 7 points]</i>		
"I make sure to use a condom every time I have sex ... I never bother if I use a condom whenever I have sex", p < 0.001	0.6	0.6 (0.5–0.8)
"I don't use a condom when I have sex with my sexual partner because I always trust him... I use a condom when I have sex with my sexual partner because I don't trust him", p < 0.001	1.7	1.7 (1.3–2.1)
"I try to never deny myself anything I'm craving... I make do with the barest of necessities", p = 0.09	1.2	0.8 (0.6–1.0)
"I have no problem coming to the NGO that works with homosexuals ... I prefer not to come to the NGOs that work with homosexuals", p = 0.05	0.9	1.2 (1.0–1.5)
"Overall, I'm satisfied with the way my female partner and I spend our leisure time (e.g., pursuing hobbies, doing sports, taking strolls, etc.) ... I'm not satisfied at all with the way my female partner and I spend our leisure time", p = 0.14	0.9	0.8 (0.7–1.1)

Table 2

The results obtained from the logistic equation, in which safe sexual behavior during sexual intercourse with male or female partners over the last month is the dependable variable (*belonging to the subgroup of respondents who have consistently used condoms during anal sex with male partners or during vaginal or anal sex with female partners is the event whose probability is determined based on the factors presented*),  $N = 357$  persons

Factor	OR	AOR (95% CI)
<i>"Do you have a child / children?" (ref. = 'no'), p &lt; 0.001</i>		
Yes	0.4	0.4 (0.2–0.7)
<i>Internalized homophobia, p = 0.08</i>		
[on a decreasing scale from 3 to 15 points]	1.0	1.1 (1.0–1.2)
<i>Value Inventory [on a scale from 1 to 4 points]</i>		
Self-Direction, p < 0.001	0.9	0.5 (0.3–0.8)
Tradition, p = 0.04	1.4	1.6 (1.0–2.4)

Achievement, $p = 0.07$	1.3	1.5 (1.0–2.4)
Benevolence, $p = 0.04$	0.9	0.7 (0.4–1.0)
<b><i>“I hide my sexual orientation from my male/ female sexual partner” (ref. = 'agree'), <math>p = 0.08</math></i></b>		
I disagree	0.5	0.6 (0.3–1.1)
<b><i>“Alcohol helps me meet male partners for sex” (ref. = 'agree'), <math>p &lt; 0.001</math></i></b>		
I disagree	2.7	2.7 (1.4–5.2)
<b><i>“Condom use is humiliating for a man” (ref. = 'agree'), <math>p &lt; 0.001</math></i></b>		
I disagree	13	4.0 (1.2–13)
<b><i>“I am positive that the likelihood of contracting the infection through sex with my wife or mistress is remote” (ref. = 'agree'), <math>p = 0.05</math></i></b>		
I disagree	2.8	1.8 (1.1–3.4)
<b><i>“Condom use is optional because condoms do not provide 100% protection against infections” (ref. = 'agree'), <math>p &lt; 0.001</math></i></b>		
I disagree	8.8	5.8 (2.2–15)
<b><i>“During sex with women, men are at less risk of infection than women, so it is okay for men not to use condoms during such sex” (ref. = 'agree'), <math>p = 0.06</math></i></b>		
I disagree	1.0	0.5 (0.2–1.0)
<b><i>“Sex between men is frowned upon and condemned in our society, so it must be kept secret” (ref. = 'agree'), <math>p &lt; 0.13</math></i></b>		
I disagree	1.2	0.5 (0.2–1.2)
<b><i>Score on the Semantic Differential [axis] [on a scale from 1 to 7 points]</i></b>		
“I make sure to use a condom every time I have sex ... I never bother if I use a condom whenever I have sex”, $p < 0.001$	0.5	0.6 (0.4–0.7)
“I don't use a condom when I have sex with my sexual partner because I always trust him... I use a condom when I have sex with my sexual partner because I don't trust him”, $p < 0.001$	1.5	1.5 (1.2–1.8)
“I don't think I run the risk of contracting HIV and sexually transmitted diseases ... I have a fear of contracting HIV and sexually transmitted diseases”, $p = 0.13$	1.2	0.9 (0.7–1.0)
“I always tell my sexual partner about myself ... I prefer not to say too much about myself to my sexual partners”, $p = 0.08$	0.9	0.9 (0.7–1.0)
“I always trust everything my female partner says or does ... I always doubt everything my female partner says or does”, $p = 0.11$	0.9	0.9 (0.7–1.0)

**Female respondents.** The initial set of predictors and the simplification procedure are the same as described above for the male respondents. The relevant results are shown below in Table 3.

Table 3

The results obtained from the logistic equation, in which the dependable variable is the question *“Please take a moment to think back over the last six months. Was a male or female condom used during the last VAGINAL sexual encounter you had?”* (the ‘YES’ response is the event whose probability is determined based on the factors presented),  
*N = 101 persons*

Factor	OR	AOR (95% CI)
<b>Marital Status (ref. = 'never married'), p = 0.01</b>		
Married	0.2	0.2 (0.1–0.8)
Divorced or widowed	0.2	0.2 (0.0–0.7)
<b>“Do you have a regular male partner?” (ref. = 'no, I don't'), p = 0.09</b>		
Yes, I have one or several regular male partners	0.4	0.2 (0.0–1.5)
<b>Number of male partners in the last six months, p = 0.16</b>		
[continuous variable]	1.3	1.3 (0.9–2.0)
<b>Basic knowledge of HIV/ AIDS (ref. = 'none'), p &lt; 0.001</b>		
E	3.2	4.8 (1.6–15)
<b>Score on the Semantic Differential [axis] [on a scale from 1 to 7 points]</b>		
“I have few sexual male partners ... I have numerous sexual male partners, p < 0.02	1.0	1.7 (1.1–2.7)
“I make sure to use a condom every time I have sex ... I never bother if I use a condom whenever I have sex”, p < 0.001	0.4	0.3 (0.1–0.5)
“I try to never deny myself anything I'm craving... I make do with the barest of necessities”, p = 0.05	1.1	1.5 (1.0–2.4)
“In most cases, I do like the others do [follow the crowd] ... I always do everything my way, no matter what others think”, p = 0.01	0.6	0.4 (0.2–0.9)
“Overall, I'm satisfied with my relationship within the family ... I'm not satisfied at all with my relationship within the family”, p = 0.05	0.8	0.7 (0.5–1.0)

The key factors associated with risky sexual behavior among female partners of bisexual men (condom protection was used the last time they had vaginal sex) include as follows: marital status of female respondents (compared to unmarried respondents, married or divorced women are five times less likely to report using safe sexual practices), basic knowledge of HIV/ AIDS (the female respondents who correctly responded to the five basic questions regarding the nature of HIV and the major routes of its transmission are five times more likely to report using protection the last time they had vaginal sex), self-description as a person who has numerous sexual partners among men, who makes sure protection is used every time she has sex, who, in most cases, does like the others do (such women are more likely to report condoms being used the last time they had sex).

As shown above, the variables linked with homophobia, family relationships, HIV service coverage, alcohol consumption prove to be statistically insignificant. On the one hand, the most significant are the linkages with the variables that describe women as persons taking responsibility for their own lives, while, on the other hand, those that relate to women's trust toward their partners (when the trust is there, i.e. the partner is regular, which complies with traditional gender roles, use of male or female condoms is less likely; in contrast, when there is no trust, i.e. her sexual partners are many, — the likelihood of condom use is higher).

*Consequently*, the data presented herein provide a basis for concluding that some social-psychological characteristics act as risk factors for both bisexual men and their female partners, even though the lists of such factors for male and female respondents across the survey pool differ.

