



# HIV INTEGRATED BEHAVIORAL AND BIOLOGICAL SURVEILLANCE SURVEYS-KOSOVO, 2014

## Female Sex Workers in Ferizaj

With the financial support of



#### Members of the survey reference group

The members of the survey reference group included Ardita Tahirukaj, WHO Office in Kosovo, Alban Gjonbalaj, KAPHA - Kosovo Association of People Living with HIV, Luljeta Gashi, National Institute of Public Health of Kosovo and Edona Deva, Community Development Fund (CDF).

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### **ABBREVIATIONS/ACRONYMS**

Female Sex Worker
Global Fund to fight AIDS, TB and Malaria
Human Immunodeficiency Virus
National Institute of Public Health
Men who have sex with men
Non-Governmental Organization
Population size estimates
People who inject drugs
Respondent Driven Sampling
Sexually Transmitted Infection
Voluntary Counseling and Testing
World Health Organization
Community Development Fund

#### **EXECUTIVE SUMMARY**

This report presents findings from a survey of female sex workers (FSW) in Ferizaj, conducted in July, August and September of 2014. The primary objective of this survey was to provide information on the prevalence of HIV infection and associated risk factors to inform programmatic and policy responses and provide a time point for monitoring epidemic trends.

This survey was funded by GFATM through the Community Development Fund (CDF), Pristina, Kosovo, and implemented by the National Institute of Public Health (NIPH), Pristina, Kosovo. Funding for the survey and technical support were provided by GFATM through CDF. This survey used convenience sampling to sample 60 FSW and key informant interviews to estimate population sizes.

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#### BACKGROUND

This report presents findings from a survey of female sex workers (FSW) in Ferizaj, conducted in July, August and September of 2014. The primary objective of this survey was to provide information on the prevalence of HIV infection and other sexually transmitted infections and the associated risk factors to inform programmatic and policy responses and provide a time point for monitoring epidemic trends.

The first survey of FSW was conducted between February and July 2006 with financial support from the United States Agency for International Development (USAID) and UNAIDS Programme Acceleration Funds managed by the UN Theme Group (UNTG) on HIV/AIDS in Kosovo. This survey used convenience sampling to collect data from 157 FSW in Ferizaj. The second survey of FSW was conducted in 2011 with financial support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM). Data were collected from FSW in Ferizaj (n=100) and Prizren (n=100) using convenience sampling.

#### **HIV in Kosovo**

Kosovo is estimated to have an HIV prevalence below 0.1%, with only 90 cases of HIV reported as of December 2013. Although HIV is expected to be higher among populations at higher risk of HIV such as and FSW, no HIV infection has been found in the previous two rounds of surveys conducted in 2006 and 2011 (Table 1). No syphilis infection was detected among FSW in 2006; 3.5% of FSW were infected with syphilis in 2011. High prevalence of hepatitis B (HBV) was identified in the 2006 survey, but much lower HBV prevalence was found in the 2011 survey. Hepatitis C (HCV) prevalence was 3.3% in 2006 and decreased to 0 in 2011.

Table 1. HIV, Syphilis, Hepatitis B (HBV) and Hepatitis C (HCV) prevalence among FSW, 2006 and 2011<sup>i</sup>.

Test	2006	2011
HIV	0	0
Syphilis	0	3.5
HBV	18.3	2.5
HCV	3.3	0

<sup>&</sup>lt;sup>i</sup> These data are collected through convenience sampling and should be interpreted with a high level of caution.

#### **RATIONALE AND OBJECTIVES**

In the summer of 2014, a survey using convenience sampling was conducted among female sex workers (FSW) in Ferizaj.

#### **Specific Objectives**

Specific objectives of the survey were to determine the prevalence of HIV and other STI and associated risk behaviors and to provide a baseline for monitoring trends in the HIV epidemic in among FSW in Ferizaj, Kosovo. In addition, the study objectives included:

- Measuring key socio-demographic characteristics.
- Quantifying alcohol and drug use.
- Assessing the use of and access to health and social welfare programs.
- Assessing the knowledge of and attitudes towards HIV/AIDS.
- Evaluating attitudes of stigma and discrimination towards people living with HIV.
- Measuring STI occurrence and treatment seeking behaviors.
- Evaluating knowledge of and access to prevention services.
- Strengthening the research capacities of national teams.
- Developing recommendations to guide programs and expand services and identify means to increase FSW programs coverage and uptake.
- Estimating the population sizes of the FSW in select cities in Kosovo.

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#### Eligibility

All eligible participants were 18 years or older and had exchanged sex for money or goods in the past year.

#### **METHODS**

#### **Formative research**

Key informant interviews were conducted during the week of May 26, 2014 in order to identify the potential to sample FSW using a sampling method other than convenience sampling. As has happened in previous years, it was determined that sampling FSW in Pristina, the capitol and largest city in Kosovo, would be impossible for the following reasons: 1) no ability to access FSW as they are too hidden; 2) dangerous to access them due to their connection with crime elements; and, 3) no organization willing to collaborate in sampling FSW.

Based on a meeting with the staff of the policlinic Aorta in Ferizaj, Kosovo, that provides HIV and other STI testing and health care services to women, it was decided that the only feasible location to conduct a survey of FSW would be in Ferizaj with the help of staff from Aorta. Aorta was also selected because: 1) their past experience in 2006 and 2011 in conducting surveys with FSW; 2) their willingness to collaborate in the survey; and 3) their excellent reputation with FSW and FSW monitors.

No other cities in Kosovo besides Ferizaj were deemed appropriate for sampling FSW.

#### **Data collection locations**

FSW were sampled through the policlinic Aorta in Ferizaj, as they presented for HIV testing and other clinical services. Ferizaj is located in the south-eastern part of Kosovo and has an estimated population of 108,610<sup>1</sup> (Figure 1). Ferizaj was selected because the policlinic Aorta has access to FSW and was willing to participate in conducting the survey. The policlinic Aorta has previously conducted surveys of FSW in Ferizaj.



#### Figure 1. Map of Kosovo identifying Ferizaj.

#### Simple surveillance to sample FSW

FSW were sampled using convenience sampling. FSW who present to the policlinic Aorta for services were interviewed by staff and tested for HIV, syphilis and HBV. Because FSW are often brought to the clinic by monitors, the consent process, interviewing and testing were conducted privately without the knowledge of the monitor. Although this was a convenience sample and will, in no way, represent the FSW community in Ferizaj, it may be useful for providing a 'rough idea' of the behaviors practiced by FSW in Ferizaj. Basically, these data are just as good as any sentinel surveillance exercise. FSW were provided a gift of cosmetics valued at 10 Euro.

#### **Sample Size Calculation**

Given that FSW are a difficult group to sample in Kosovo and that the sampling method would use convenience sampling, no sample size was calculated. It was hoped to be able to sample at least 60 FSW.

#### **Tools development**

The protocol and final questionnaire were finalized by a team from NIPH and Survey Reference Group and organization partners working with FSW using information from the formative research and a questionnaire from Family Health International.<sup>2</sup> The questionnaire collected data on socio-demographic characteristics, sexual and drug risk behaviors, HIV transmission, HIV and STI signs and symptoms, HIV knowledge, perceptions, stigma and discrimination, information on respondents' social network sizes, as well as access to and utilization of HIV related services. The protocol and questionnaire were submitted for ethical review and approval to the Ethical Board of the Ministry of Health, Republic of Kosovo.

#### Staffing

Staff members for the survey were trained by the NIPH on how to administer the questionnaire.

#### LABORATORY PROCEDURES

#### **Biological specimen collection, storage, transport and processing**

Following the interview and pre-test counseling, the laboratory technician collected venous blood sample (app. five millilitres) into vacutainer and stored in refrigerator located at the Policlinic centre AORTA, Ferizaj until transportation (with the help of cooling box) to the laboratory of the Department of Microbiology, National Institute of Public Health of Kosovo, in Prishtina. At the laboratory samples were centrifuged and serum stored in minus 20°C until testing was conducted. Testing was anonymous and linked. Samples were tested with ELISA testing kits on presence of antibodies against HIV1/2, IgM and IgG antibodies against Treponema pallidum and presence of HBsAg and antibodies against HBsAg (antiHBs). Samples which were initially positive on ELISA antiHIV1/2 would be tested on Western Blot HIV1/2 confirmation test.

#### **Results procedures**

Tests were processed at the laboratory in NIPH Kosovo, Prishtina one-twice a week in order to provide results as soon as possible. Test results were sent to the AORTA site manager in printed form and in closed envelopes by the NIPH staff.

#### **DATA MANAGEMENT AND ANALYSIS**

Behavioral data were entered weekly and stored into a Microsoft Excel spread sheet. Data cleaning and quality control were conducted by the NIPH in Pristina. Final datasets underwent consistency checks. Frequencies and cross-tabulations were performed to check validity and logic of all variables in the datasets. Hard copies of completed questionnaires were stored at the NIPH in Pristina. Data were formatted and coded in Microsoft Excel and analysed in SPSS.

#### **POPULATION SIZE ESTIMATION**

Population size estimates for FSW were estimated using simple elicitation techniques from among key informants about their knowledge of the number of FSW in key cities.

#### **ETHICAL CONSIDERATIONS**

Survey participation was voluntary and respondents were informed that they were free to withdraw from the study at any time during the survey process. Following careful explanation of the survey, the consent form was read to them by a staff member. All respondents verbally stated that they understood and agreed to all of the items contained in the consent form before being enrolled in the survey. To minimize any discomfort due to the sensitive nature of the questions asked, the questionnaire was administered in a private and confidential setting. Respondents could refuse to answer any specific question and were provided the name and telephone number of the Aorta physician should they have any questions about the survey or if they believed they had been injured or mistreated as the result of their involvement in the survey.

All survey data were confidential. The clinic staff followed procedures about recording codes based on the study protocol. However no personal information was recorded on the questionnaires or the biological specimens and therefore all materials received by NIPH from Aorta were anonymous. After data collection, questionnaires, forms and test results were kept in a secure location at the Aorta office before being transferred to the NIPH in Pristina.

#### LIMITATIONS

This survey was subject to several limitations and all findings should be interpreted with extremely caution. Because behavioral data were self-reported in a face-to-face interview, in the policlinic setting, social desirability bias may have resulted in the underreporting of risky behaviors. Given that many of the FSW who were presenting at Aorta were in the presence of a monitor, women who agreed to participate may have felt rushed to complete the survey questions and in so doing may have responded inaccurately to some questions. These findings cannot be extrapolated to the larger FSW population in Ferizaj and should only be used as a 'rough idea' of the behaviors and infection prevalence of this population.

#### **STUDY FINDINGS FEMALE SEX WORKERS**

#### **Socio-demographic characteristics**

All FSW reported being below the ages of 40 years; 75% were 25 years or older (Table 2). The largest proportion were Albanian, had only a primary education, lived in Ferizaj, single, did not financially support anyone other than themselves, and did not have another source of income other than selling sex. Twenty percent reported being from nations other than Kosovo, Albania and Bulgaria; these included Serbia (n=2), Ukraine (n=2), Moldova (n=4), Romania (n=3) and Macedonia (n=1).

<u>N*</u>	%	
15	25.0	
22	36.7	
23	38.3	
15	25.0	
45	75.0	
28 (19 -37)		
15	25.0	
23	38.3	
10	16.7	
12	20.0	
6	10.0	
32	53.3	
19	31.7	
3	5.0	
9	15.0	
30	50.0	
11	18.3	
10	16.7	
	15 22 23  15 45 28 (19 - 37) 15 23 10 12 6 32 19 3 9 30 11	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

#### Table 2. Socio-demographic characteristics of FSW, 2014

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Single	34		
Single		56.7	
Married	6	10.0	
Divorced	9	15.0	
Separated	11	18.3	
Supports someone financially			
Yes	13	21.7	
No	47	78.3	
Source of income other than s	sex		
Yes	26	44.1	
No	33	55.9	

#### **General sexual behaviors**

The median age of first sex with any partner was 17 years (Table 3). FSW reported knowing a median of three other females engaged in selling sex for money or goods. The majority of FSW reported selling sex at a hotel, bar or nightclub and 51% reported ever being forced to have sex with a man

#### Table 3. General sexual behaviors among FSW, 2014

	N*	%
Median (min., max) age at first sexual intercourse with any partner	17 (15-29)	
Median (min., max) number of females who exchange sex known to participant	3 (1-9)	
Place to provide sex for money/goods	5	
Home	13	23.6
Someone else's home	12	21.8
Hotel/ bar/nightclub	30	54.5
Ever forced to have sex by a man		
Yes	25	51.0
No	24	49.0

#### Alcohol and drug use in the past month

Just over one quarter of FSW reported drinking alcohol often and 22% reported using drugs before sexual intercourse with a client (Table 4).

Table 4. Alcohol and drug use in the past month among F3W, 2014			
	N*	%	
Frequency of alcohol use			
Never	2	3.5	
Rarely	24	42.1	
Sometimes	16	28.1	
Often	15	26.3	
Drug use before sexual interc	ourse with client		
Yes	13	22.4	
No	45	77.6	

#### Sexual behavior with clients

FSW reported having a median number of three partners in the past week (Table 5). The majority of FSW reported using a condom during their last vaginal sex with a client, however only 33% reported using condoms every time they have sexual intercourse with a client in the past month.

Table 5. Sexual behavior with clients among FSW, 2	)14
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	N*	%
Number of paying partners in past we	ek	
Median (max., min.)	3 (1-5)	
Used condom during last vaginal sex w	vith client	
Yes	28	62.2
No	17	37.8
Used condom with clients every time	having sexua	l
intercourse in past month		
Yes	20	33.3
No	40	66.7

#### Sexual behavior with regular partners

Fifty two percent of FSW reported having a regular partner; 66.7% of whom have sex with other women (Table 6). Only one quarter of FSW reported using a condom with their last non-paying partner and more than half reported ever talking about HIV/AIDS with their regular partner.

	N*	%	
Has regular partner		-	
Yes	28	51.9	
No	26	48.1	
Regular partner has sex with other women			
Yes	20	66.7	
No	2	33.3	
Used condom at last sex with non-paying			
Yes	8	25.0	
No	24	75.0	
Ever talked about HIV/AIDS with regular			
Yes	18	56.3	
No	14	43.8	

#### Table 6. Sexual behavior with regular partners among FSW, 2014

#### Access to male condoms

Only 23% of FSW reported always carrying condoms, 91% reported it being easy to find condoms when needed and 57% reported receiving condoms for free from a service in the past 12 months (Table 7). When asked if they had agreed to sex without a condom if they were offered more money, 60% said that this situation had never happened.

	N*	%	
Always carries condoms		-	
Yes	13	23.2	
No	43	76.8	
Able to easily find condom	s when needed		
Yes	51	91.1	
No	5	8.9	
Received condoms for free	from service		

#### Table 7. Access to male condoms among FSW, 2014

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Yes	32	57.1
No	24	42.9
Agreed to sex without condom the last tim	e more money	was offered
Yes	17	32.7
No	4	7.7
Never been offered more money for no	31	59.6

#### STI signs and symptoms and treatment access in past 12 months

Twenty four percent of FSW reported experiencing increased discharge and 21% reported experiencing itching, redness and ulcerations in the past 12 months (Table 8). The majority of FSW reported consulting a medical professional when they had signs or symptoms of an STI<sup>II</sup>.

	N*	%
Has experienced increased discharge		
Yes	12	24.0
No	38	76.0
Has experienced itching, redness, ulcerations		
Yes	11	21.2
No	41	78.8
Consult for genital/anal sore/ulcer or unusual		
Medical doctor/health worker	8	57.1
Self-treatment with medicines from pharmacy	2	14.3
No treatment	4	28.6

### Table 8. STI signs and symptoms and treatment access in past 12 months among FSW,2014

#### HIV transmission knowledge

Just over half of FSW have correct knowledge of HIV transmission based on correct responses to a composite of five knowledge questions (Table 9). Most FSW responded correctly to individual transmission questions but only 70% knew that a healthy looking

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<sup>&</sup>lt;sup>ii</sup> Because this sample is based on females presenting to an STI clinic, these data likely over represent signs and symptoms of STIs in FSW.

person can have HIV. Few FSW believed that someone can get HIV from mosquito bites or from sharing a meal with an infected person. Most FSW reported not know if they were at risk of HIV.

#### Table 9. HIV transmission knowledge among FSW, 2014

	N*	%
Has correct HIV transmission Knowledge		
Yes	33	55.0
No	27	45.0
Having sex with only one faithful, uninfected partner reduce the risk of HIV transmission		
Yes	43	72.9
No	16	27.1
Using a condom correctly every time during sex can protect someone from getting infected with HIV		
Yes	49	83.1
No	10	16.9
A healthy-looking person can have HIV		
Yes	41	69.5
No	18	30.5
A person can get HIV from mosquito bites		
Yes	3	5.1
No	56	94.9
A person can get HIV by sharing a meal with someone who is infected		
Yes	1	1.7
No	58	98.3
Perceived risk of getting infected		

Not possible	5	9.1
Very low possibility	18	32.7
Moderate possibility	1	1.8
Doesn't know	31	56.4

#### **HIV testing**

Just over half of FSW knew where to get an HIV test in Ferizaj and have ever been tested for HIV (Table 10). Among those ever tested, only 28% were tested in the last 12 months; the majority of these were tested at a health facility compared to at a private clinic or lab or abroad. Among those tested in the last 12 months, 83% received their test results and among all participants, 42% were tested in the past 12 months and received their test results.

	N*	%
Possible to get HIV test in Pristina	-	
Yes	33	55.9
No	26	44.1
Has ever been tested for HIV		
Yes	29	51.8
No	27	48.2
Tested for HIV in past 12 months (among those		
tested ever tested)		
Yes	8	27.6
No	21	72.4
Location of last test		
Health facility	15	50.0
Private Clinic/lab	10	33.3
Abroad	5	16.7
Participant received HIV test result at last testing		
Yes	25	83.3
No	5	16.7

#### Table 10. HIV testing among FSW, 2014

HIV test in past 12 months and received test results				
(among all participants)				
Yes	25	41.7		
No	35	58.3		

#### **HIV, HBV and Syphilis Prevalence**

No FSW tested positive for HIV, infectious HBV or secondary Syphilis. Eighteen percent were positive for HBV which may indicate previous vaccine against HBV and 2% were positive for recent contact with Treponema pallidum (the causative agent of Syphilis).

Disease prevalence	N*	%	
HIV	<u> </u>		
Negative	60	100.0	
Positive HBV (HBsAg)			
Negative	60	100.0	
Positive HBV (AntiHbs)			
Negative	49	81.7	
Positive Syphilis (IgG)	11	18.3	
Negative	59	98.3	
Positive			
Syphilis (IgM)			
Negative	58	96.7	
Positive	1	1.7	

Table 11. HIV, HBV and Syphilis Prevalence among FSW, 2014

#### **POPULATION SIZE ESTIMATIONS**

#### **Best guess estimations**

Estimating the size of populations on extremely hidden populations is almost impossible. In order to get some type of understanding of the numbers of FSW in Kosovo, we asked key experts<sup>iii</sup> who provided the population size estimations in table 2.

# Table 12. Population size estimates of FSW in Kosovo using expert opinions and 2011 census data.

	Highest	Lowest	Middle	Adult female population size <sup>iv</sup>	Percentage of adult females selling sex
Ferizaj 1	500	400	450	72,900	0.6
Prizren	600	400	500	69.800	0.7
Pristina	900	600	750	78,100	1.0
Pristina <sup>v</sup>	1500	500	1000		1.3
Mean percenta	ge for Pristina	·			1.2
Mitrovica	300	200	250	31,380	0.8
Реја	250	400	300		1.1
Gjakova	400	250	325	37,100	0.9
Mean percenta	ge				0.9

#### Final estimated population sizes

If we were to say that the mean percentage of females selling sex is 0.9% and that the total adult female population in Kosovo is approximately 704,622, then there would be a total of 6,342 FSW in Kosovo.

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<sup>&</sup>lt;sup>iii</sup>These estimates come from the individuals working on HIV prevention among FSW.

<sup>&</sup>lt;sup>iv</sup> Calculated by taking 51% of total population and then subtracting 23% to account for population under 18 years. Data accessed from 2011 Census results from http://ask.rks-gov.net/eng/.

<sup>&</sup>lt;sup>v</sup> Representative from Police.

#### **DISCUSSION AND RECOMMENDATIONS**

#### **Selling sex in public places**

Most FSW reported selling sex in hotels, bars and nightclubs. Safe sex messages, distribution of condoms, outreach access and other prevention activities should be available to FSW and clients in these venues.

#### **High level of forced sex**

Half of the FSW sampled had been forced to have sex. It is important to include a psychological assessment and possible counseling about surviving forced sex when developing any outreach services for FSW in Kosovo.

#### Majority are using alcohol.

The majority of FSW reported drinking alcohol in the past month either sometimes or often. It is well known that alcohol can undermine the ability to make good decisions about safe sex. Alcohol use assessments should be considered when developing prevention services for FSW.

#### High levels of risky sexual behaviors.

FSW have multiple sexual partners, although this number is low compared to many other locations, and use condoms inconsistenty resulting in increased risk for HIV and STI transmission. In addition, FSW reported having regular partners who similtaneously have other sex partners and with whom they are not using condoms. Finally, when asked if they had agreed to have sex without a condom if they were offered more money, 60% said that this situation had never happened which indicates that FSW themselves are deciding not to consistently use condoms. Education and outreach programs must focus on clients and male sex partners of FSW, as well as FSW, to encourage condom use.

#### Low composite scores for HIV knowledge.

Only half of FSW had correct knowledge of HIV transmission based on correct responses to five knowledge questions. There is evidence of the need for increased education about HIV risk and transmission for sexually active females. Education about sexual health must start in primary school given that FSW reported only attending up to primary school, most of them were under the age of 30 and that the sexual debut of some of these women started at 15 years.

#### HIV testing among FSW is low.

Although FSWs have risky behaviors, only 42% have had an HIV test and received their test results in the past year. HIV VCT for FSW could be addressed in several ways: (a) increase awareness about the importance of being tested and the availability of HIV testing locations; (b) promotion of the use of existing services, with additional training for counselors on how to receive and provide quality VCT services for this population, (c) providing more VCT services to FSW in 'female friendly' settings, and (d) using FSW peer educators to educate FSW and their partners about HIV.

#### No HIV.

FSW in this survey in Ferizaj were found to have no HIV. It is important to assess whether other FSW in Kosovo have HIV. Given the dangerous and hidden aspect of FSW in Kosovo, it is not known how this information can be collected. Qualitative research is needed to ascertain the risk level of FSW in the country and to determine methods for ensuring that they have access to testing.

#### Potential spread of Syphilis.

Syphilis prevalence was low among this biased sample of FSW. Better research is needed to determine the true magnitude of syphilis and other STIs that exist among FSW in Kosovo.

#### The FSW population size.

Population size estimations based on key informants are likely to be biased. A rigorous mapping process would likely provide more accurate estimates. However, given how hidden sex work is in Kosovo, the estiamtes derived from key informants provide a benchmark by which is based future estimates. We estiamted that 0.9% or roughly 6,000 females are selling sex in Kosovo. This estimate can be useful for making decisions on how resources should be allocated for better program planning and management.

#### SUMMARY OF KEY RECOMMENDATIONS

- Adapt new WHO guidelines<sup>3</sup> for prevention and treatment of STIs among FSW;
- Scale-up prevention and testing programs for FSW.
- Scale-up coverage, screening, condom distribution and implementation of combination prevention.
- Map FSW to get a more accurate population size estimation.
- Integrate prevention and screening among FSW at public health centers, including in reproductive health services.
- Educate health staff to improve prevention services targeting high risk populations, especially FSW.
- Develop programs targeting the clients and other sexual partners of FSW clients (conduct action research activities on the acceptability of condoms by clients).
- Establish better ties to more hidden and 'controlled' FSW to increase access to them in order to deliver safe sex education and other services.
- Educate doctors and other medical staff to assess alcohol and drug use of females who have multiple sex partners; also educate doctors and other medical staff to provide effective and accurate counseling to women at risk of alcohol and drug abuse.
- Increase outreach efforts and continue to scale up HIV prevention and education services.
- Increase education access and availability about HIV risk and transmission for sexually active females, including by starting in primary school.
- Use the population size estimations of FSW to improve the planning and allocation of resources for prevention and intervention programs.
- Initiate policy changes in reducing stigma related to female sex work, to address sexual health needs of FSW and their partners.

#### **CONCLUSION**

To conclude, FSW in this sample are at risk for HIV despite the fact that no HIV was found. This sample is highly biased and should not be used to make representations about FSW in Ferizaj or other parts of Kosovo. The hidden nature of sex work in Kosovo makes it is unlikely that representative samples will be feasible. Therefore, we must rely on limited information gathered through qualitative work or samples using convenience methods. It is important to focus on trying to build access and trust with FSW and those in charge of them to be able to provide services. Ideally, a decriminalized and legalized system for FSW would work best for the health of those selling and buying sex as well as for all sexually active citizens in Kosovo. Currently, HIV is considered to be low in the general population in Kosovo. And although this survey found no HIV in this FSW sample, it is possible that other FSW in Kosovo are not only infected and transmitting HIV, but also being infected by their clients and other sexual partners.

It is unfortunate that more robust sampling methods are not feasible among FSW in Kosovo. Nevertheless, these data can provide some informatin that will be useful in guiding prevention strategies to ensure the health of FSW, their clients and other sexual partners and the partners of clients.

#### **REFERENCES**

<sup>1</sup> Kosovo Agency for Statistics, census 2011.

<sup>2</sup> Family Health International. (2000). Behavioral Surveillance Surveys: Guidelines for Repeated Behavioral Surveys in Populations at Risk of HIV. Arlington, VA: Family Health International. Available at:

http://www.fhi.org/en/HIVAIDS/pub/guide/bssguidelines.htm.

<sup>3</sup> World Health Organization. Guidelines: Prevention and treatment of HIV and other sexually transmitted infections for sex workers in low- and middle-income countries. http://www.who.int/hiv/pub/guidelines/sex\_worker/en/

#### **APPENDIX**

#### Questionnaire

Date: \_\_\_\_\_ Code number: \_\_\_\_\_

Initials of interviewer:\_\_\_\_\_

#### **Questionnaire for FSW 2014**

#### Introduction

I (introduce yourself) work for the National AIDS Control Programme in Kosova. We are conducting a study that focuses on HIV and other infections risks among females who exchange sex for money or goods and would be very grateful if you agree to participate. The study is anonymous (we do not record your name or any other identifier) and completely confidential - which means that the information collected will be made available only to researchers for the purpose of scientific analyses. In addition to this interview, in which we will ask you some personal questions, we will offer you free and anonymous testing for HIV, hepatitis B, and syphilis. If needed, we will refer you to treatment, free of charge. We will award you with a gift if you agree to participate in this study (interview and blood drawing). You can refuse to answer any question and end the interview whenever you wish. Also, you can quit the study at any stage.

#### NOW THAT YOU ARE INFORMED ABOUT THE STUDY, DO YOU AGREE TO PARTICIPATE?

Interviewer's signature BELOW confirms that the participants agreed to participate:\_\_\_\_\_

The time when the interview began:	
The time when the interview ended:	

#### Section 1: Socio-demographic information

No.	Question	Answer	COMMENT
101	What is your age	(years)	
102	What is your nationality?	1- Kosovar	
		2- Albanian	
		3- Serbian	
		4- Ukrainian	
		5- Moldavian	
		6- Bulgarian	
		7- Romanian	
		8- Macedonian	
		9- Other (Specify :)	
		99- Refused to answer	
103	Level of Education	1- No formal education	
		2- Primary education	
		3- Secondary education	
		4- High education	
		(college/university)	
104	Where do you live right now?	1- Prizren	
		2- Ferizaj	
		3- Prishtine	
		4- Some other place (Specify)	
105	With whom do you live?	99– Refused to answer	
105	With whom do you live?	1- Parents or grandparents	
		2- Husband	
		3- Employer/at worksite	
		<ul><li>4- Colleagues, friends</li><li>5- Alone</li></ul>	
		6- Someone else (Specify)	

106	What is your civil status right now?	1-	Single
		2-	Married
		3-	Divorced
		4-	Widow
		5-	Separate
		6-	Other (Specify)
107	Right now, do you financially	1-	Yes
	support someone other than	2-	No
	yourself (children, husband,		
	parents etc.)		

#### Section 2: Information regarding regular sex partner and sex work

Now I would like to ask you about a regular sex partner, that is, someone you consider your husband or boyfriend with whom no money or goods are exchanged directly for sex.

No.	Question	Answer	COMMENT
201	At what age was the first time you exchanged sex for money or goods?	years old 99- Refused to answer	
202	How many other women that exchange sex for money/goods do you know personally and have talked to in the last two months.	Enter the number: 	
203	How do you find men who want to pay money/goods to have sex with you? MULTIPLE ANSWERS POSSIBLE: CIRCLE ALL THAT ARE MENTIONED	<ol> <li>1- In hotels</li> <li>2- In bars/nightclubs</li> <li>3- In public spaces such as the street, bus stops, parks</li> <li>4- through the internet, social media sites</li> <li>5- Through the phone (e.g. men contact me by calling)</li> <li>6- Through middlemen (e.g taxi drivers)</li> <li>7- Other (specify :)</li> </ol>	
204	Where do you <b>usually</b> (or <i>most often</i> ) provide sex in exchange for money/goods?	<ol> <li>At home</li> <li>At someone else's house/apartment</li> <li>In a hotel</li> <li>In a car or truck</li> <li>at a bar or nightclub</li> <li>in public spaces such as alleyways, streets and parks</li> <li>Someplace else (specify:)</li> <li>Refused to answer</li> </ol>	

205	Has any man ever forced you to have sex with him (having sex with someone you did not want to have sex with)?	1- Yes 2- No 99- Refused to answer
206	Has anyone forced you to have sex with someone that you did not want to have sex with?	1- Yes 2- No 99- Refused to answer
207	Do you have another source of income (aside from exchanging money or goods for sex)?	1- Yes 2- No

#### Section 3 – Information about alcohol and drug use

Now, I would like to ask you about alcohol and drug use. I will also ask you some questions about sexual intercourse. By sexual intercourse I men anal or vaginal penetrative sex.

No. Question	Answer	COMMENT
301 During the last month, how often did you drink alcohol (more than 1 glass of wine, 1 beer or 1 hard liquor drink) before having sexual intercourse with someone who paid you for sex?	<ol> <li>Never</li> <li>Rarely</li> <li>Sometimes</li> <li>Often</li> <li>99- refused to answer</li> </ol>	
302 During the last month, did you take any illegal drug before having sexual intercourse with someone who paid you for sex?	<ol> <li>Yes</li> <li>No</li> <li>99- Refused to answer</li> </ol>	IF "NO", GO TO 401
303 During the last month, which drug did you use <b>most often</b> (or <i>most</i> <i>frequently</i> )?	<ol> <li>Hashish</li> <li>Cocaine</li> <li>Heroin</li> <li>Amphetamines</li> <li>Tranquilizers</li> <li>Ecstasy</li> <li>Something else (what:)</li> </ol>	DO NOT READ OUT OPTIONS
304 During the last month, have you injected drugs (used drugs intravenously)?	1- Yes 2- No 99- Refused to answer	
305 The last time you injected drugs, did you share injecting equipment (needles or syringes)? By sharing we mean that you used equipment that someone else already used or that someone has used the equipment that you have used.	<ul><li>1- Yes</li><li>2- No</li><li>99- Refused to answer</li></ul>	
Section 4: Number of clients and condom us	Se la	

Now I will ask you some questions about anal or vaginal penetrative sex (sexual intercourse) and condom use with men who pay you to have sex with them.

No.	Question	Answer	COMMENT
401	During the LAST WEEK, with how		
	many men who paid you for sex	(enter the number)	
	did you have sexual intercourse?	99- Refused to answer	
402	Last time you had vaginal	1- Yes	
	intercourse (penis in vagina) with	2- No	
	someone who paid you, did you	99- Refused to answer	
	use condom?		
403	Last time you had anal	1 - Yes	
	intercourse (penis in anus, butt)	2 - No	
	with someone who paid you, did	3 – never had anal sex with client	
	you use a condom?	99- Refused to answer	
404	During the last month, did you	1- Yes	
	use condoms with clients each	2- No	
	and every time you had sexual		
	intercourse?		

#### Section 5: Information on non-paying/regular (steady) partner

Now I will ask you some questions about sexual intercourse (vaginal or anal) with non-paying and regular or steady partners (someone you consider your husband or boyfriend with whom no money or goods are exchanged directly for sex).

No.	Question	Answer	COMMENT
501	Right now, do you have a regular	1- Yes	IF "NO" GO
	non-paying sex partner?	2- No	то
		99- Refused to answer	QUESTION
			601
502	Does your regular sex partner	1- Yes	
	have sex with other women or	2- No	
	men?	3- I do not know	
		99- Refused to answer	
503	At your last sexual intercourse	1- Yes	
	with a regular non-paying	2- No	
	partner, was a condom used?		
504	Have you ever talked about	1- Yes	
	HIV/AIDS with your regular non-	2- No	
	paying partner?		

#### Section 6: Information on condom availability

No.	Question	Answer	COMMENT
601	Do you always have condoms	1- Yes	
	with you?	2- No	
		99- Refused to answer	

FEMALE SEX WORKERS IN FERIZAJ

602	Can you easily find condoms any time you want them?	1- Yes 2- No	
603	In the last 12 months, have you received free condoms from a service or organization?	3- Yes 4- No	
604	Where do you <b>usually</b> ( <i>most</i> often) obtain condoms? ONLY ONE ANSWER	<ol> <li>I do not use condoms</li> <li>I get them from medical workers</li> <li>I get them from NGO workers</li> <li>I get them from clients</li> <li>I get them from friends</li> <li>I get them from someone else</li> <li>I buy them in pharmacy/shop</li> <li>I buy them from bars/hotel management</li> <li>I buy them from other women who exchange sex for money or goods</li> <li>Something else, Specify)</li> <li>Refused to answer</li> </ol>	DO NOT READ OUT OPTIONS.
605	The last time someone offered you more money for having sex without a condom, did you agreed?	<ol> <li>Yes</li> <li>No</li> <li>No paying person ever suggested it</li> <li>99- Refused to answer</li> </ol>	

#### Section 7: Information on STI symptoms and treatment

Now I will ask you about infections that are caused by having sexual intercourse.

No.	Question	Answer	COMMENT
701	During the last year, have you	1- Yes	
	experienced increased	2- No	
	vaginal/anal discharges or pains	99- Refused to answer	
	in the genital area?		
702	During the last year, have you	1- Yes	IF BOTH
	experienced itching, redness,	2- No	701 AND
	ulcerations or skin lesions in the	99- Refused to answer	702 ARE
	genital area?		"NO", GO
			TO 705

703	Whom did you consult for the treatment of vaginal/anal discharges or pains or itching, redness, ulcerations or skin lesions in the genital area mentioned problems?	<ol> <li>Medical doctor, health worker</li> <li>Friend or relative</li> <li>Pimp</li> <li>Nobody, I treated myself with medicines from the pharmacy or clinic</li> <li>Nobody, I did not treat it</li> <li>Other (Specify)</li> <li>Refused to answer</li> </ol>	DO NOT READ OUT OPTIONS IF THE ANSWER IS NOT "1", GO TO 705
704	Why did you not consult a medical doctor or health worker?	<ol> <li>1- Too expensive</li> <li>2- Health facility is too far away</li> <li>3- I do not like to go to doctors</li> <li>4- I prefer using traditional medicine</li> <li>5- I prefer treating myself</li> <li>6- I had no time</li> <li>7- I did not think it was necessary</li> <li>8- I was afraid/shy</li> <li>9. Something else (Specify :)</li> <li>99- Refused to answer</li> </ol>	DO NOT READ OUT OPTIONS, BUT
705	Have you ever been diagnosed with an STI?	1 – Yes 2 – No 3 – Don't know	
Section	8: HIV knowledge, attitudes towar	d HIV+, HIV testing, and personal risk-asses	sment
No.	Question	Answer	COMMENT
801	Can having sex with only one faithful and uninfected partner reduce the risk of HIV infection?	1- Yes 2- No 3- I don't know	
802	Can the practice of using condoms reduce the risk of HIV infection?	1- Yes 2- No 3- I don't know	
803	Can a healthy looking person be infected with HIV?	1- Yes 2- No 3- I don't know	
804	Can a person get HIV from mosquito bites?	1- Yes 2- No 3- I don't know	
805	Can a person get HIV by sharing a meal with someone who is infected?	1- Yes 2- No 3- I don't know	

	Do you know a place where you	1- Yes	
806	can test for HIV for free and anonymously?	2- No	
807	Have you ever tested for HIV?	1- Yes	IF "NO" GO
	,	2- No	TO 811
		99- Refused to answer	
808	When did you test the last	1- In the last year	
	time?	2- More than one year ago	
809	Where was this last test done?	1- Health facility	
		2- Private clinic/laboratory	
		3- NGO site	
		4- Abroad (outside of Kosova)	
		5- Someplace else (Specify :)	
810	Do you learn the result of your	1-Yes	
	(last) HIV test?	2- No	
811	What was the result of you last	1- Positive	
	HIV test	2- Negative	
		3- Refuse to Answer	
812	If you think about your	1- Not possible	
	behaviors in the last year, how	2- Very low possibility	
	possible do you think it is that	3- Moderate possibility	
	you become infected with HIV?	4- High possibility	
		5- I don't know	
Section	9: Population size estimate	-	
No.	Question	Answer	COMMENT
901	What do you think is		
	the <u>highest</u> number of women	Write the number:	
	18 years and above, living in		
	Ferizaj who exchange sex for		
	money/goods? (please give		
902	your best guess) What do you think is		
902	What do you think is the lowest number of women	Write the number:	
	18 years and above, living in	Write the number:	
	Ferizaj who exchange sex for		

money/goods?

your best guess)

(please give

Thank you!