Prevalence of HIV and other Sexually Transmitted Infections among Female Sex Workers in Bosnia and Herzegovina

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ABSTRACT

Introduction: Sex workers (SW) represent the population exposed to extremely high risk of HIV (HIV - Human Immunodeficiency Virus) and other sexually transmitted infections. Poor socioeconomic conditions in the country, insufficient education, high unemployment and other factors lead to an increase in prostitution, which represents a high risk for the spread of HIV and other sexually transmitted diseases.

Aim of the study: The aim of this research was to evaluate the prevalence of HIV/sexually transmitted infections among SW in Bosnia and Herzegovina as well as to examine knowledge, attitudes and behaviour relating to HIV/sexually transmitted infections. The results were compared with the results obtained in researches conducted in 2008 and 2010.

Material and Methods: Research was performed in 2012 as a bio-behavioral study that covered 199 sex workers in five cities of Bosnia and Herzegovina. Interviewing was done voluntarily, anonymously and confidentially, and after informed consent and counselling, a biological material (blood) for laboratory testing on HIV, hepatitis b, hepatitis c and syphilis was taken. The research shows the presence of risk behaviour among SW, mostly related to frequent change of partners and frequent unprotected sexual intercourse.

Results:

Only one third of respondents (36,7%) use condom during every sexual intercourse with a client, and 13% use it with a steady partner. A sexual intercourse after effects of consumption of alcohol-87,9% of respondents and of drugs-36,7% of respondents. Although there is a risk behaviour, only 11,1% think that the risk of HIV/sexually transmitted infections is high, but 12,6% think that there is no risk. Sex workers are 13,5 times more exposed to HIV infection than all the other women aged 15- 49. Results of laboratory testing indicate a low level of HIV/sexually transmitted infections among sex workers in Bosnia and Herzegovina.

Conclusion:

Although there is a relative progress in prevention of HIV/sexually transmitted infections among sex workers and more frequent testing on HIV/sexually transmitted infections comparing to earlier periods, these things are insufficient for the maintenance of a low level of infection. Further research at certain time intervals among this population would enable monitoring time trends of HIV epidemic in Bosnia and Herzegovina and would become a basis for the development of preventable programmes.

Key words: prevalence, HIV, sexually transmitted infections, sex workers.

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Introduction

HIV (Human Immunodeficiency Virus) and other sexually transmitted infections (hepatitis b, hepatitis c, syphilis etc.) still represent one of the largest problems of public health worldwide.

According to data from the World Health Organization, it is estimated that there are about 35 million people worldwide currently living with HIV, out of which 3 million are children, while 19 million do not know that they are HIV-positive¹. It is also considered that out of the total number of 35 million of HIV positive people, 2-4 million also have hepatitis b and 4-5 million are with hepatitis c too. The highest number of those infected is still in sub-Saharan Africa.²

Although the total number of newly infected cases was 2,1 million in 2013, there is globally a decreasing trend in new cases of HIV infections. In comparison to 2001, when the number of newly infected was 3,4 million, there was a decline in the number of new infections registered in 2012 by 33% (2,3 millions) and by 38% in 2013². The number of newly infected children in 2013 was 240 000, which was 58% lower than in 2002 when the number was 580 000.¹

The number of death cases caused by Acquired Immune Deficiency Syndrome – AIDS was reduced by 35% in comparison to 2005, when it reached its maximum. Only in last three years, mortality dropped by 19%, which is the highest annual drop in the last 10 years.¹ However, a significant increase in the number of death cases happened in certain regions at the same period of time (Middle East, Northern Africa, Eastern Europe, and Central Asia).

According to the definition by the World Health Organization, sex workers are considered to be female, male, and transsexual adult persons (at the age of 18 and more) who receive money or goods in exchange for sexual services they provide regularly or occasionally.⁴

Sex workers are extremely important population that must be controlled in order to prevent the expansion of HIV and other sexually transmitted infections, since due to the frequent unprotected sexual intercourse and other factors, they can be a cause of infection transmission on clients who then infect their partners and, in that way, the epidemic is also being expended among general population.

Having in mind specific high risk behaviour, the World Health Organization defines sex workers as groups under a higher risk of HIV infection and thus request primary prevention of HIV infection, diagnosis, treatment and care.⁴

There are many reasons for that, but primarily it is related to frequent sexual intercourse with different clients without regular use of condoms, followed by a high percentage of

drug and alcohol consumption during intercourse, thus increasing the risk of infection transmission.

Sex workers are also often exposed to discrimination, stigmatization, violence and other negative social occurrences, and they are not easily available for regular testing, prevention and treatment.^{3,4}

According to data obtained between 2007 and 2011, it was determined that HIV prevalence among SW was 11,8% with significant deviations between regions. HIV prevalence in sub-Saharan Africa was 36,9%, in Eastern Europe it was 10,9%, in Latin America and Caribbean 6,1% and in Asia 5,2%. The lowest HIV prevalence among SW was recorded in the Middle East and in Northern Africa (1,7%).³ The study also showed that SW were 13,5 times more exposed to the risk of HIV infection than all the other women aged 15 – 49.³

Therefore it is crucial to do constant monitoring of HIV infection trend as well as behaviour related to HIV and the availability of antiretroviral therapy and potential usage of prophylaxis, especially among vulnerable populations.⁵

Aims of the study

The general aim of the research conducted from September to December of 2012 was to examine the risk behaviour of SW population in Bosnia and Herzegovina - the population exposed to the increased risk of HIV/sexually transmitted infections. The aim was also to identify risk factors and forms of risk-taking behaviour in order to plan preventive measures and to evaluate the success and coverage of target population conducted by prevented programmes.

Specific aims of the research included:

- to evaluate the prevalence of HIV and selected sexually transmitted infections in SW population and the risk factors accompanied with HIV infection;
- to examine knowledge, attitude and behaviour relating to HIV/sexually transmitted infections in SW population;
- to examine sociodemographic and cultural features relating to relevant risk behaviour of target population and to compare the data obtained with the researches conducted in 2008 and 2010.

Patients and Methods

The research was conducted as a descriptive, multicentric and bio-behavioral study of the prevalence among SW who were defined as any female person who exchanged sexual services for money or something else.

Inclusion criteria for participation in a study were as follows: self-identification of a person as a SW, then that they were engaged in paid sexual service in the past 12 months (penetrative sex), that were older than 16, and given

informed consent for participation in the study. Exclusion criteria were as follows: a person younger than 16 and current injection drug user. The research was conducted with the prior approval from the Ethical Committee of the Public Health Institute of the Republic of Srpska.

The research was conducted in five larger cities in Bosnia and Herzegovina. The sample was selected by using a snowball sample.

Field research covered 199 sexual workers aged 18-48. By applying standardized and encrypted questionnaire of an interview method, interviewing was done voluntarily, anonymously and confidentially. After informed consent, blood samples were taken for laboratory testing on HIV, hepatitis B, hepatitis C and syphilis. Blood sample and a referral with an identification code as on the questionnaire were delivered to the laboratory.

Newer-generation ELISA tests were used for testing which was performed in the microbiological laboratory of the Public Health Institute of the Republic of Srpska and in the Institute for Biomedical Diagnostics and Research "Nalaz" from Sarajevo.

Respondents were given a phone number on which they could, within 15 days, get the information on testing results and possible post-test consultation.

A software SPSS for Windows (version 15.00, SPSS INC, Chicago, Illinois, USA) was used for statistical data analysis. A method of descriptive statistics was used in data processing. Data were shown as frequency and percentage for categorical variables, median and range for ordinals, mean and standard deviation, depending on data distribution, for continuous variables. χ^2 test, with the degree of probability of $p < 0,05$, was used to test differences.

Results

The research covered 199 respondents in five cities of Bosnia and Herzegovina: Bijeljina (34), Banja Luka (55), Mostar (30), Sarajevo (50), and Zenica (30). Majority of the respondents are citizens of Bosnia and Herzegovina (95,5%), out of which 89,4% live in the city. The mean age of respondents is 27,75 (SD= 6,12; IQR=18-48 years). According to the educational structure, the highest percentage of respondents have secondary school education (67,8%), followed by the university degree (16,1%) and associated degree (10,1%), and 6% with completed primary school education. About half of the respondents (51,8%) do not have permanent employment, 17,6% are permanently employed, 21,1% work occasionally, and 9,5% are students. About half of the respondents (54,3%) have a health insurance. 11,6% of the respondents are married, 14,6% are divorced, and the highest percentage is of the

single women (67,8%) and that difference is statistically significant ($p < 0,001$).

We compared results of our research with the results of the researches conducted in Bosnia and Herzegovina in 2008 and 2010.

The average age of the first sexual intercourse is 16,5 (SD=1,72; IQR=13-22). 27,6% of the respondents had their first sexual intercourse under the age of 16, 59,8% of them at the age of 16-18, and 12,6% of them (the lowest percentage) had their first sexual intercourse after the age of 18 and that difference is statistically significant ($p < 0,001$). 8% of respondents had their first paid sexual service for money or something else under the age of 16, about half of them (50,8%) at the age of 17-21, and about one third (32,7%) at the age of 22-26. The average age of the first paid sexual service is 21 and, comparing to the previous researches, it has decreasing trend (in 2008 – the age of 23,3 and in 2010 – the age of 21,2).

The average duration of providing sexual services is 6,1 years (SD=4,58; IQR=1-24).

Majority of respondents (75,9%) states up to five clients a week, and the average number of clients per week is 3,2, which is less than in the researches conducted in 2008 and 2010, so it has a decreasing trend. The most common way for finding clients is via corresponding contact person (47,7%). Places where respondents mainly meet their clients are clubs/casinos (64,3%), followed by private parties (53,6%), coffee bars (48,2%), but not that often in park or on the street. Places where respondents offer sexual services most often are in rented room (59,8%), hotel (53,3%), their own flat/house (53,3%), public facility (5%), park or some other public place (3,5%).

More than 50% of respondents experienced some kind of violence- most often psychological one (33,7%), physical one (33,2%), and 1,5% of them were victims of trafficking.

Almost all the respondents (97%) state that they provide sexual services for money. About half of respondents (46,2%) provide sexual services for clothes, while a lower percentage of them for food, drink and drugs. 54% of respondents were paid for sexual intercourse in the last month. Experience of imprisonment had 4,5% of SW. About 90% of respondents provided the oral and vaginal sexual services, but 49,7% of them provided the anal sexual services in the last month.

When it comes to the use of condom as the most important measure for prevention of HIV/sexually transmitted infections the results are still unsatisfactory.

Only 36,7% of respondents state that they use condoms during every sexual intercourse with a client, unlike 2,5% of

them who say that they did not use a condom with a client in the past month. Only 31,2 % of respondents state that they often use condoms. The frequency for condom usage with a steady partner is extremely low; only 13% of them say that they use condoms every time, 13% of them say that they often use them and 31,5% of them say that they never use condoms with a steady partner (Graph 1).

Graph 1. Frequency of condom use with a steady partner (in 2012)

The highest rate of condom use with a client is during vaginal sexual intercourse (87,6%), followed by the anal sexual intercourse (66,1%), and the lowest rate of condom use is reported during oral sexual intercourse (46,2%). The frequency of condom use during last sexual intercourse is 87,6% and it is of approximate rate to the one from the research conducted in 2010, while there is a noticeable decline of rate in condom use during anal sexual intercourse (66,1%) in comparison to the previous research when it was 82,5% (Graph 2.).

Graph 2. Frequency of condom use during last sexual intercourse (in 2008, 2010 and 2012)

According to the place of research, condom usage rate shows significant differences. During last vaginal sexual intercourse, the use of condom is lowest in Banja Luka (74,5%), and the highest rate is in Sarajevo (100%). When it comes to the anal sexual intercourse, the lowest rate is in Mostar (50%), but the highest rate is in Sarajevo (86,1%).

During the last oral sexual intercourse, the highest rate is in Sarajevo (68%), and the lowest one is in Bijeljina (24,2%).

As a reason for the use of condom while providing sexual services, 80,8% of respondents state that they use condoms because they want to. This percentage is significantly higher than in the previous research (59,6%). Only 39,9% of respondents use condoms upon client's request.

When it comes to other risk behaviours, there is a decreasing trend in comparison to the previous researches. A high percentage of respondents (87,9%) state the experience of sexual intercourse under alcohol influence, and 36,7% under drug influence, which must be interpreted carefully since injection drug users were not taken into research.

Comparing to the previous two researches, there is an increase of percentage of those who state that they had some sexually transmitted infections (28,9%) (Graph 3).

Graph 3. Self-reported sexually transmitted infections (STI), a trend (2008, 2010 and 2012)

The most commonly self-registered sexually transmitted infections are HPV (32,7%), gonorrhea (26,2%), genital herpes (24,4%), and the least common self-registered STI are syphilis (3,2%) , hepatitis B virus (1,6%) and other (13,1%) .

Out of the total number of eight questions related to their knowledge of HIV/sexually transmitted infection, 28,1% of respondents answered correctly all the questions. When compared with the previous researches (2008 and 2010) the respondents in this research showed a slightly better knowledge (Table 1.).

By analyzing the self-assessment results of the risk on HIV/ sexually transmitted infections, only 11,1% state that the risk is high, 12,6% of them say that there is no risk, 31,2% of them say that the risk is low. The answer that the risk is moderate gave 45,2% of them (the largest percentage).

Table 1. Knowledge on HIV/STI total sample of SW (2008, 2010 and 2012)

Questions	BiH 2008	BiH 2010	BiH 2012
HIV infection can be significantly decreased by proper condom usage	n=146	n=154	n=198
yes	92,5	96,1	99,5
no	1,4	1,9	0,5
doesn't know	6,2	1,9	0
A person looking healthy can be HIV infected	n=146	n=154	n=199
yes	70,5	84,4	81,9
no	8,2	5,2	6,5
doesn't know	21,2	10,4	11,6
When using cutlery used by HIV infected persons, another person can be infected by HIV	n=144	n=154	n=199
yes	11,0	12,3	11,6
no	56,3	56,5	71,9
doesn't know	32,7	31,2	16,6
When using already used needles, a person can be infected by HIV		n=154	n=199
yes		96,8	92,5
no		0,6	0,5
doesn't know		2,6	7,0
STI can be transmitted by oral sexual intercourse		n=154	n=199
yes		54,5	71,9
no		14,9	16,6
doesn't know		30,5	11,6
A pregnant woman with HIV can pass HIV to her baby	n=146	n=154	n=199
yes	72,6	81,2	80,4
no	5,5	5,8	4,0
doesn't know	21,9	13,0	15,6
A person can be HIV infected by mosquito bite		n=154	n=199
yes		11,0	14,1
no		48,1	62,8
doesn't know		40,9	23,1
The risk of HIV is decreased by mutual fidelity among HIV-uninfected sexual partners			n=199
yes			71,9
no			14,1
doesn't know			14,1

n = a number of respondents who answered the question

In all three researches, there is a declining trend of self-assessment that the risk of HIV/sexually transmitted infections is high, and there is an increasing trend of self-

assessment that there is no risk. This is worrying and points to a lack of knowledge and awareness of this population.

When asked if they knew a place where they could get tested, 84,9% of respondents answered confirmatively, mostly referring to the Clinic for Infectious Diseases, and 44% of respondents to the Non-Governmental Organizations (NGO counselling centres) as of places where they can get tested for HIV/STI infection.

The results showed that almost two thirds of respondents (59,8%) had never been tested for HIV and that was significantly higher comparing to the respondents who had done it once or several times (40,2%) ($p < 0,001$). Of the total number of respondents, 20 of them (10,1%) got tested for HIV in the past 12 months and they know the test result, which is slightly lower comparing to the previous researches (13,6% in 2010 and 13,7% in 2008).

By analyzing the results of respondents who got tested for HIV in the past 12 months, according to the place, the largest number of respondents got tested in Banja Luka (47,4%) and the lowest number in Bijeljina (5,6%); the percentage of respondents who want to know the test results: 16,7% in Zenica, 16,4% in Banja Luka, 13,3% in Mostar, 2,9% in Bijeljina and 2% in Sarajevo.

After informed consent, all respondents gave blood for testing for HIV, HBV, HCV and syphilis. Test results showed that one sample was reactive on HIV, eight samples were reactive on HCV, one sample was reactive on HBV, and none on syphilis. Comparative test results in researches conducted (2008, 2010 and 2012) are shown on Graph 4. The lower rate of reactive results for HCV infection in research conducted in 2012 can be the result of the current injection drug users exclusion from the study.

Discussion

This is the third bio-behavioral science section conducted in order to assess the prevalence of HIV/sexually transmitted infections, knowledge and attitude, and risk and protective forms of behaviour among SW population in Bosnia and Herzegovina. Based on the data obtained in the studies conducted, the occurrence and expansion of HIV/sexually transmitted infections can be followed among SW population in Bosnia and Herzegovina as well as their knowledge, attitudes and behaviour.

The research conducted in five cities of Bosnia and Herzegovina from September to November 2012 included 199 respondents of an average age 27,7 without significant differences when it comes to age in comparison to the researches from 2008 and 2010.^{13,14} The respondents were citizens of Bosnia and Herzegovina, from urban areas. The largest percentage of respondents have secondary school education (67,8%). Slightly more than a half of

the respondents (51,8%) were not employed at the time of interviewing and 17,6% of them are permanently employed, which shows the obvious increase rate of employees, because the number of students/pupils decreases comparing to the researches from 2008 and 2010.^{13,14}

The largest number of respondents are single (67,8%), 11,6% of respondents are married, without significant differences in comparison to the researches from 2008 and 2010.^{13,14} The average age of the first sexual intercourse among respondents is 16,5. The largest number of respondents (59,8%) had their first sexual intercourse at the age of 16 -18, and 30% of them had their first sexual intercourse before the age of 16. 8% of respondents had their first paid sexual service for money or something else before the age of 16, and about a half of the respondents (50,8%) at the age of 17-21. These data are especially worrying because, according to the Convention on the Rights of the Child (CRC), children and adolescents who are less than 18 years old, but who provide sexual services for money or something else, are considered to be 'sexually exploited', and not sexual workers.³

By analyzing the results of the age of the first sexual intercourse in all three researches, it can be noticed that the age limit is lowered comparing to the research in 2008 (17,3 years) and it is slightly higher than in 2010 (16,3 years).^{13,14}

The average age of providing the first paid sexual intercourse among respondents is 21 years and, comparing to the previous researches, it has a decreasing trend, which implies that younger and younger population is engaged in sexual services. The largest number of the respondents state that their engagement in sexual services lasts for about 6,1 years, which is slightly less comparing to the research in 2010 (6,7 years), but more comparing to the research in 2008 (4,4 years), with an average of three clients a week.^{13,14}

The highest rate of condom usage during sexual intercourse with a client is reported during vaginal intercourse (87,6%), followed by the anal intercourse (66,1%), and the lowest rate of the use of condom is reported during the oral sexual intercourse (46,2%). There has been a decline in the rate of condom usage during the anal sexual intercourse (66,1%) comparing to the previous research (82,5%).¹⁴ The research results on the use of condom in terms of locations/cities show the largest frequency of condom usage for all three types of sexual intercourses among the respondents in Sarajevo, but the lowest one in Bijeljina for the oral intercourse, in Banja Luka for the vaginal intercourse, and in Mostar for the anal intercourse.

More than two thirds of respondents say that they get condoms from the non-governmental organizations, through

Voluntary Counselling and Testing centres, and through other field activities.

A large number of respondents state that they provided sexual services under the influence of alcohol (87,9%) which when compared to the previous researches has a trend of slight decrease,^{13,14} and under drug influence (36,7%), which is less than in 2010.¹⁴ 28,9% of respondents report having had a sexually transmitted infection, with increasing trend comparing to the previous researches.^{13,14} The most usual infections are HPV, gonorrhea and genital herpes, then syphilis, hepatitis b or some other sexually transmitted infections.

When suspecting some sexually transmitted infection, more than a half of the respondents would go to the doctors in the private health institutions, which can indicate a certain lack of confidence, fear of stigma, and thus insufficiently accessible health service.

28,1% of respondents answered correctly on all 8 questions related to the knowledge of HIV/sexually transmitted infections and the modes of transmission and the rate of correct answers on most questions was over 70%, which was slightly better comparing to previous researches.^{13,14} When it comes to the self-assessment on the risk of HIV/STI, the largest percentage of respondents think that the risk of HIV infection is moderate to low, some of them are aware of the real risk, but that awareness decreases in comparison to the previous researches, thus indicating a further need for raising awareness about this problem.

Similar results on knowledge, attitudes and practice as well as on STI prevalence are obtained in the researches conducted in other countries of the Balkans, which confirmed that the countries of southeastern Europe belong to the countries with a low prevalence of HIV/sexually transmitted infections, but still with the insufficient level of awareness about prevention, diagnosis and treatment of these diseases, with certain improvements comparing to the previous period.⁶⁻⁹

Respondents mainly have knowledge on places where they can get tested for HIV and they state the Clinic for Infectious Diseases and NGO counselling centres, but a small number of them mentions the Public Health Institutions.

Slightly more than two thirds of respondents (40,2%) have already got tested for HIV and every tenth respondent (10,1%) tested for HIV in the past 12 months knows the test results, which is slightly less comparing to the previous researches.^{13,14}

Of the total number of 199 samples, one case of HIV infection, eight cases of HCV infection and one case of HBV infection were detected by using serological analysis of blood samples. Comparing to the previous two researches,

there is a decrease rate of hepatitis C and hepatitis B positivity and syphilis infections are not registered. Comparing to the previous researches, one case of HIV positive is registered (Graph 4.).

Graph 4. The rate of positive serological analysis of HIV/STI (2008, 2010 and 2012)

The results of numerous researches confirm that the key factors of risk behaviour for HIV transmission are as follows: unprotected sexual intercourse, improper use of condom, multiple sex partners, frequent change of partners, frequent and untreated sexually transmitted infections with the important role of social and biological co-factors which increase a risk exposure probability of HIV.¹⁰⁻¹² Namely, social climate in Bosnia and Herzegovina, as in many other countries, is negative toward that vulnerable population, limiting their rights, with accompanying effects on their psychosocial health representing an additional HIV risk factor, including limited access to appropriate services and support.

Conclusion

The study of prevalence conducted in 2012 shows a relative progress in HIV prevention comparing to 2008 and 2010 among SW: the increase of condom usage during last vaginal intercourse, but not during the oral and anal intercourses. The increasing trend of sexually transmitted infections is evident, but self-assessment of HIV risk is low. Nearly two-thirds of the respondents have never been tested for HIV, and in all three researches there is a low rate of respondents tested in the past 12 months for HIV knowing the test results. The results of serological analysis show maintenance of low prevalence of HIV/sexually transmitted infections.

The change in behaviour is obvious but still insufficient, because risks are still present (multiple partners, sexual intercourses under drug and alcohol influences, unprotected sexual intercourses with clients and steady partners etc.).

When developing prevention programmes one must keep in mind that SW population is highly stigmatized and

hard to reach so it is necessary to, through acceptable communication channels, implement targeted educational and informational activities and to organize campaigns for proper use of condom with continuous raise of awareness of the risk of HIV and other sexually transmitted infections among SW population.

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Prevalencija HIV-a i drugih polno prenosivih infekcija među seksualnim radnicama u Bosni i Hercegovini

SAŽETAK

Uvod: Seksualne radnice (Sex Workers-SW) predstavljaju populaciju koja je izložena izuzetno velikom riziku za prenos virusa humane deficijencije (HIV-Human Immunodeficiency Virus) i drugih polno prenosivih infekcija. Loši socio-ekonomski uslovi u zemlji, nedovoljna obrazovanost stanovništva, visoka nezaposlenost i drugi faktori dovode do porasta prostitucije, što predstavlja veliki rizik za širenje HIV-a i drugih polno prenosivih bolesti.

Cilj rada: Cilj ovog istraživanja je bio da se procijeni prevalencija HIV/polno prenosivih infekcija među SW u Bosni i Hercegovini (BiH), te da se ispituju znanje, stavovi i ponašanje u odnosu na HIV/polno prenosive infekcije. Dobijeni rezultati su upoređeni sa rezultatima u istraživanjima provedenim 2008. i 2010. godine.

Materijal i metode: Istraživanje je 2012.godine provedeno kao bio-bihevioralna studija kojom je obuhvaćeno 199 seksualnih radnica u pet gradova u BiH u 2012. godini. Urađeno je dobrovoljno, anonimno i povjerljivo anketiranje, a nakon informisanog pristanka i obavljenog savjetovanja, uzet je biološki materijal (krv) za laboratorijsko testiranje na HIV, hepatitis B, hepatitis C i sifilis.

Rezultati: Istraživanje je pokazalo prisustvo rizičnog ponašanja među SW, koje se prije svega odnosi na čestu promjenu partnera i česte nezaštićene seksualne odnose. Samo jedna trećina ispitanica (36,7%) koristi kondom pri svakom seksualnom odnosu sa klijentima, a 13% sa stalnim partnerom. Seksualni odnos pod uticajem alkohola ima 87,9%, a droga 36,7% ispitanica. Iako postoji rizično ponašanje, samo 11,1% ispitanica smatra da je rizik od HIV/polno prenosivih infekcija veliki, dok se 12,6% ispitanica izjasnilo da rizik ne postoji. Seksualne radnice su 13,5 puta više izložene riziku od HIV infekcije u odnosu na sve druge žene dobi od 15 do 49 godina. Rezultati laboratorijskih testiranja ukazuju na nizak nivo HIV/polno prenosivih infekcija među seksualnim radnicama u BiH.

Zaključak: Iako postoji relativan napredak u prevenciji HIV/polno prenosivih infekcija među seksualnim radnicama i učestalije testiranje na HIV/polno prenosive infekcije u odnosu na ranije periode, to nije dovoljno za održavanje niskog nivoa infekcije. Dalja istraživanja, u određenim vremenskim intervalima, bi, među ovom populacijom, omogućila praćenje vremenskog trenda HIV epidemije u BiH i bila osnova za izradu preventivnih programa.

Ključne riječi: prevalencija, HIV, polno prenosive infekcije, seksualne radnice