



BORDER|NET *work*

2010-2012 CROSSING BORDERS, BUILDING BRIDGES

Female sex workers and health care

Vulnerability of sex workers and their particular needs for HIV/STI prevention, diagnosis, treatment, and care: research findings, policy implications, and recommendations for comprehensive sexual health response

Final IBBS report: Deliverable D6
BORDERNETwork Work Package 5



Funded by
the Health Programme
of the European Union



Bundesministerium
für Gesundheit

 **SPI FORSCHUNG**

Copyrights 2012

Copyrights remain with the author(s) and the publisher

BORDERNETwork 2012-2012

Highly active prevention: scale up HIV/AIDS/STI prevention, diagnostic and therapy across sectors and borders in CEE and SEE

Author(s): Tzvetina Arsova Netzelmann (1); Elfriede Steffan (1); Lillia Löhmus (2); Jury Kalikov (3); Anda Karnite (4), Alexander Leffers (5), Barbora Kucharova (6), Rayna Dimitrova (7), Cristina Fierbinteanu (8)

Affiliations: (1) SPI Forschung gGmbH, Berlin, Germany; (2) National Institute for Health Development, Tallinn, Estonia; (3) AIDS Information and Support Centre, Tallinn, Estonia; (4) Latvia's Association for Family Planning and Sexual Health, Riga, Latvia; (5) Aids Hilfe Potsdam, Potsdam, Germany; (6) C.A. Prima, Bratislava, Slovak Republic; (7) Health and Social Development Foundation, Sofia, Bulgaria; (8) Romanian Associations against AIDS, Bucharest, Romania

With assistance of SPI Forschung GmbH collaborators: Dieter Oremus, Christine Körner, Viktoriya Kolarova, Joyce Dreezens-Fuhrke, PhD

Editing: Joyce Dreezens-Fuhrke, PhD, Tzvetina Arsova Netzelmann

Publisher: SPI Forschung gGmbH, Kottbusser Str.9, 10999 Berlin, Germany

This final IBBS report arises from the project BORDERNETwork which has received funding from the European Union in the framework of the Health Programme.

Table of Contents

Executive Summary	5
I. Introduction.....	6
II. Objectives.....	7
III. Methods.....	7
IV. Sample and recruitment.....	8
V. Sex work scenes and study settings.....	8
VI. Behavioural data: structured interview	9
VII. Biological data.....	9
VIII. Results	11
8.1 Socio-demographic profile	11
8.2 Sex work experience and circumstances.....	14
8.3 Mobility in the sex work	15
8.4 Substance use experience and circumstances.....	16
8.5 Access to health care, HIV/STI/sexual health services.....	18
8.6 Commercial sex services, sexual and other risks	21
8.7 HIV/STIs prevalence	22
IX. Summary of major findings per survey location.....	25
9.1 Bulgaria (N=120)	25
9.2 Estonia (N=210)	25
9.3 Germany/Poland (N=107)	26
9.4 Latvia (N=117).....	27
9.5 Romania (N=200).....	27
9.6 Slovak Republic (N=202)	28
X. Discussion and conclusions.....	29
XI. Recommendations	32
XII. References.....	33
List of abbreviations	34

Tables

Table 1: Specifications of the tests used.....	10
Table 2: Prevalence of HIV and STIs.....	23
Table 3: Risk predictors (OR) for specific infections	23

Figures

Figure 1: Nationality of survey participants	11
Figure 2: Age groups of survey participants per survey location	12
Figure 3: Education grade of survey participants	13
Figure 4: Years of experience with the sex work per survey location.....	14
Figure 5: Age at first experience with sex work	15
Figure 6: Experience with injecting drugs per survey location.....	17
Figure 7: Proportion of respondents without health insurance per survey location	18
Figure 8: Proportion of respondents who had not visited an STI specialist in the past twelve months per survey location	19
Figure 9: Proportion of respondents who had not visited a gynaecologist/sexual health/family planning specialist in the past 12 months per survey location .	20

Executive Summary

Background and objectives

While prostitution as such is being a frequent and often controversial topic of discussion at expert and political levels in Europe, the evidence-based knowledge of sex work in general and the situation of the SWs in particular, is still scarce. Epidemiologically, SWs are not considered a population at higher risk for HIV exposure Europe-wide. Nonetheless the overlap of risks (ID use, young age) and high mobility (particularly since the last EU-extension) are important HIV risk predictors insufficiently studied in cross-country comparison. Alongside in many countries SW suffer double vulnerability, belonging to a migrant or marginalised minority community, often lacking legal papers and a health insurance. Services' access is additionally hampered by harsh stigmatization and criminalising or abolitionist prostitution legislation. The EU-project BORDERNETwork (Work Package 5) addressed these aspects through an 'Integrated bio-behavioural survey' (IBBS) in seven EU countries, adopting ethics of research and human rights. Its aim was threefold: to compile contextualised knowledge on the health and social situation of SWs in Central, Eastern and South Eastern Europe studying six UNGASS indicators among others; to enhance evidence of prevalence of and vulnerability to HIV/AIDS/STIs; and to formulate recommendations for prevention practice.

Methods

Cross-section and cross-country behavioural and epidemiological data collection was conducted between March 2011 and February 2012 through face-to-face interviews (an 85-items behavioural questionnaire) and blood tests (HIV, Syphilis, HCV, HBV) among female SWs. The survey locations were Berlin, Bratislava, Bucharest, the German-Polish border, Riga, Szczecin, Sofia, and Tallinn. A convenient sample was recruited, combining elements of respondent-driven and service/venue-based sampling techniques. A total of 956 respondents (predominantly from the outdoor sex work scene) participated - between 100 and 210 per country.

Findings

The findings outlined multiple risks: About 38% of the SWs had experience with injecting drugs, 60% lacked a health insurance. 59% had had an HIV test in the past year, but STI/sexual health services were hardly utilised. 78.1% had not attended a STI-specialist and 51.1% had not visited a gynaecologist in the past year. The prevalence for HIV was 4.6%, for Syphilis - 4.6%, for Hepatitis B - 6.2%, and for Hepatitis C - 24% (over 90% among PWID). Risk predictors linked in particular to increased prevalence of Syphilis, HBV, and HCV were drug and alcohol use before/during sex work and inconsistent condom use during oral/vaginal sex with clients.

Conclusion

The behavioural and social determinants of risk, including precarious living conditions and stigma, multiply the vulnerability of SWs impeding their access to health and social care. To that end policy regulations should endorse the creation of structures for early and easy access to health services. An adequate health care provision package (incl. sexual health) should be envisaged including those SWs lacking health, social insurance and legal status in the country of stay also.

I. Introduction

While in general prostitution is a frequent and often controversial topic of discussion at expert and political levels in Europe, the evidence-based knowledge of sex work and of the situation of the SWs in particular, is still scarce. Epidemiologically, SWs are not considered a population at higher risk for HIV exposure Europe-wide and is hence not considered as a priority by some of the national HIV programmes [1]. Nevertheless ECDC [2] reports that HIV prevalence among sex workers is exceeding 1% in 14 countries in the European Region, among others in two Central and Eastern European countries (Estonia and Romania). Data from a cross-section bio-behavioural survey among UK-born and migrant sex workers from Eastern Europe conducted in London (2008-2009) proved 1.1% HIV prevalence, while the detected prevalence of Syphilis was 2.2% and respectively 6.4% for Chlamydia or Gonorrhoea [3]. A similar multi-city survey, conducted in the Netherlands (2002-2005) detected an overall HIV prevalence of 5.7% among female sex workers, which was much higher among the drug-using respondents (13.6%) than among non drug-using sex workers (1.5%) [4]. In Moscow a clinic-based survey (2005) and HIV/STI testing in SWs outlined an HIV prevalence of 4.8% revealing new heterosexual HIV/STI transmission patterns in a SW setting associated previously with IDU-related risks [5].

This multiple research data corroborates the need to address sex workers as a priority target group for HIV/STI prevention, diagnostic and treatment in the context of combination prevention.

In its recommendations for prevention and treatment of HIV and other STIs for SWs in low- and middle-income countries [6], WHO collated substantial evidence on the major vulnerability factors and occupational hazards of sex work - factors and hazards that are also applicable in high-income regions like Europe as well. According to these factors multiple overlaps can be outlined among SWs and other marginalised, vulnerable groups. Evidence of several of the 'up-streaming context and behavioural risk indicators' has been compiled: alcohol, drug use (including injection drugs), youth, early start in sex work, unsafe and partly clandestine working conditions, and a low degree of control over negotiating safer sex practices in some sex work scenes. In addition social-economic and social-cultural determinants play an aggravating role: migrant and/or ethnic minority background, poor or precarious living conditions, frequent mobility, lack of health insurance.

Last but not least the legal context of sex work in various European countries nowadays plays an important role as a broader risk determinant [7]. Sex work regimentations in the EU currently swing between partial and total criminalisation - from abolitionist to prohibitionist - with only rare exceptions of regulationist approaches. Despite the fact that all of the selected strategies and interventions share a common underlying objective - the fight against discrimination, violence, and social exclusion in the field of sex work - their approaches are very different and partly contradictory. Abolitionism enhances double moral-ity standards and contributes to further stigmatisation of sex work and social exclusion of the sex workers. Currently only nine of the 47 states in the Council of Europe have regulationist approaches towards legalisation of the sex work. However in several of these countries compulsory check-ups for the SWs are considered as a part of the regulationist concept, which raises further concerns.

Among the seven BORDERNETwork survey countries the largest majority (N=5) have prohibitionist regulations, deeming sex work legal, but not regulated (eg, Bulgaria) and at

the same time banning brothels, and street sex work (eg, Latvia). In Romania prostitution is still strictly prohibited, only in Germany it is legalised and regulated.

II. Objectives

The EU-project BORDERNETwork (Work Package 5) addressed these discrepancies in the current European context of sex work through an 'integrated bio-behavioural survey' (IBBS) in seven EU countries, adopting ethics of research and human rights. Its aim was threefold: to compile contextualised knowledge on the health and social situations of SWs in Central, Eastern and South Eastern Europe studying six UNGASS indicators among others; to enhance evidence of prevalence of and vulnerability to HIV/AIDS/STIs; and to formulate recommendations for the prevention practice. With this objective the IBBS survey took up several of the important pillars formulated by the UNAIDS guidance note for effective, evidence-informed response to HIV and sex work [8].

III. Methods

A multi-city cross-sectional survey based on combination of behavioural and epidemiological data collection was conducted between March 2011 and February 2012 in six EU capital cities and several towns in the EU border area between Germany and Poland among female sex workers. Average duration of the field phase of the study was three to four months, at longest in Germany/Poland (eight months). Various sex work settings were chosen for the recruitment of survey participants, covering both indoor and outdoor locations in Berlin, Bratislava, Bucharest, Riga, Sofia, Tallinn, and several towns in Poland along the German border.

Eligibility

The selection criteria for participation were: 1) experience in sex work (transactional sex) in the last three months and 2) not having participated in the same survey already. The definition for transactional sex used was sex for exchange of money, goods, presents, and/or drugs. Prior to the interview the respondent's informed consent assuring the willingness to participate was obtained. This happened after delivering complete information on the survey's scope and objectives, assuring anonymity of respondents and confidential treatment of data. Written information (translated into the respective survey languages) was handed over/read aloud from the interviewers. The signature of the interviewer on the last page of the behavioural questionnaire proved the obtained informed consent of the respondent. In addition the age of consent for a blood test being 18 years in the majority of the survey countries was applied as additional eligibility criteria.

IV. Sample and recruitment

Type of samples

A convenient sample was built in all survey locations, service/venue-based and respondent-driven sampling (RDS) elements being combined. In two of the survey locations (Tallinn and Riga) a respondent-driven sampling (peer to peer) was triggered through selection of initial seeds, which worked out for up to five waves. As proved also by other behavioural surveys among groups of SWs, RDS techniques show some limitations related majorly to the social network characteristics of the studied group, the clandestine working conditions and the established links to available services [9]. Due to several of the reasons mentioned the study partners who started a RDS method decided in the course of the survey to exchange it with or complement it by an active recruitment of participants through venue/service based sampling. The latter were based on cold contacts and/or individual emails to sex workers and the use of a mobile medical unit in outreach setting. The venue/service sampling was the main method applied in the rest of the survey locations.

V. Sex work scenes and study settings

In particular, data on the recruitment setting is available for 93.9% (N=898 from 956) of the interviewed survey respondents:

- a) **Service-setting** - HIV/STI service (drop-in centre of harm-reduction project, STI-clinic, community-based VCT (CBVCT), public health office, AIDS counselling cabinet). A total of 55.6% (N= 500) of respondents were recruited via those setting. Largest shares in this subsample group have the Estonian, the Latvian, and the Slovak sex workers. In one survey location (Riga) prison setting was also included in the recruitment, whereby the respondents were interviewed and tested in the local AIDS counselling centre.
- b) **Indoor sex work setting** (brothels, clubs, and flats, visited with mobile medical unit during outreach). Only 5% (N=46) of the respondents were contacted directly in indoor settings, the largest proportion of them in Bulgaria (N=44).
- c) **Outdoor sex work setting** (streetwalking sex work areas (streets, railway stations, harbour, highways, parking lots, and border areas). Almost 40% (39%, N=352) of the respondents, among whom all SWs in Romania (N=200) were recruited in these settings.

The larger part of the sex workers recruited in service settings worked also outdoor. Thus street-based sex workers are overrepresented in the survey, especially in Romania, Bulgaria, Latvia, and the Slovak Republic. Some of the outdoor sex work scenes showed a significant overlap with the IDU sex work scenes (Latvia, Romania and Slovak Republic) as the findings below indicate.

Field workers

In each local survey team two to five interviewers were involved for participants' recruitment and interviews. These were unexceptionally helping professionals (social workers,

psychologists) from HIV/STI/sexual health services or outreach service providers from sex workers- and drug-service organisations. All of the field workers were experienced in working with the group. Medical professionals (physician and/or a nurse) were also part of each survey team, responsible for the biological data collection.

Ethical considerations

Common study protocol along with national protocols (where necessary) were approved by the respective relevant ethical committees in all survey countries. All participants in the survey were offered non-monetary incentives in the form of a gift or a good voucher (cosmetic, food, drug store) in equivalent of average 6.5 EUR (3 - 10 EUR) according to the local circumstances. The respondents who recruited other survey participants (RDS technique) were offered one additional voucher per participant who showed up. Thus participating sex workers who successfully recruited three further SWs received four vouchers altogether.

VI. Behavioural data: structured interview

The behavioural questionnaire was administered through a face-to-face interview conducted by a trained interviewer upon checking of eligibility and obtaining informed consent. The questionnaire design did not foresee self-completion, as it combined various structured and multiple-answer questions with open ones. Through 85 items divided in five thematic sections data was collected on: socio-demographic characteristic (age, nationality, country of origin, ethnic background, education, occupation, marital status and partnerships, children), mobility, circumstances and experience with sex work (age of start, number of years in sex work, sexual contacts with non-paying partners and clients, sexual risk behaviour, substance use (incl. alcohol, drugs and injecting drugs practices), access and take up of HIV/STI/sexual health services, knowledge, attitudes and beliefs associated with HIV/STI, protection, health-care seeking behaviour. The behavioural questionnaire was pilot tested in two survey locations (Tallinn, Berlin) and two languages (Russian, Bulgarian). The final questionnaire was available in Bulgarian, English, Estonian, German, Hungarian, Latvian, Polish, Romanian, Russian, and Slovak. Trained cultural mediators were involved as interviewers at the sites, where sex workers who were non-nationals or had migrant background were recruited. In average the duration of the interviews was 40 minutes.

VII. Biological data

At the end of the interview the respondents were invited to give blood for the HIV/STIs test. The testing followed after the pre-test information discussion. The testing was performed in each survey team by a medical worker, trained to conduct blood tests. The equipment and testing procedures corresponds to the national standards in each of the seven survey countries. Rapid (point-of-care, POC) finger-stick or whole-blood tests were applied in Bulgaria, Romania, Slovak Republic and Estonia, standard whole-blood tests were applied in Latvia, Germany and Poland.

HIV	Hexagon HIV (Eurolab Lambda, com/ Slovak Republic); HIV-1/HIV-2 Antibody rapid immunochematographic/LG Korea); HIV-1/HIV-2 Antibody (AxSYM /Architect); HIV Ag/Ab Combo/ ABBOTT LAB/USA); Vironostika HIV Ag-Ab/ Western Blot
Treponema pallidum (Syphilis)	Hexagon Syphilis (Eurolab Lambda, com/ Slovak Republic); Syphilis rapid immunochromatographic (Ultimed); TPHA (INNO-TPHA 100/ Innogenetic/ Belgium); Omega RPR.
HBsAg (HBV)	(HBsAg test kat. c. 07-9893/ Elisabeth Pharmacon, com/- Czech Republic; AxSYM (Architect) system HBs Ag (2)/ ABBOTT LAB/USA); Cobas HBs Ag
HCV	(test kat. c. 07-9864/Elisabeth Pharmacon, com/- Czech Republic); AxSYM (Architect) HCV; ABBOTT LAB/USA); Cobas HCV Ak

Table 1: Specifications of the tests used

The sensitivity of the applied tests ranged between 99.4% (HBsAg) and 100% (HCV), the specificity between 87.7% (HCV) and 100% (HBsAg). All reactive primary rapid test samples were verified with a secondary screening test and only the positive results of the confirmatory tests were reported. After the test, each participant was encouraged to collect their test results. The results were given in person either 30 minutes after the performed tests (in case of a rapid one) or after several (up to seven in case of a standard one) days.

Each survey team had put referral pathways to treatment and care in place, in case a respondent was tested positive for one of the infections.

VIII. Results

Only some major findings from the plentiful data the survey yielded were selected here for the purpose of this executive survey report. We focus primarily on those, which enhance the evidence on the behavioural and structural risks and the prevention barriers for the group of sex workers. They prove at same time to be highly relevant to the formulated practice recommendation for improved combination prevention strategies for this most-at-risk group.

8.1 Socio-demographic profile

A total of 956 female sex workers were enrolled in the survey. 22% of them (N=210) in Tallinn, 21.1% (N=202) in Bratislava, 20.9% (N=200) in Bucharest, 12.6% (N=120) in Sofia, 12.2% (N=117) in Riga and 11.2 % (N=107) in Berlin, and several German and Polish towns in the border area between the two countries.

Nationality and ethnic background

Alongside the main nationalities in the survey countries, several further nationalities were represented in the sample: Russian (3.8%, N=35), Ukrainian (2.6%, N=25), Hungarian, Turkish and Czech among others (1.6%, N=15).

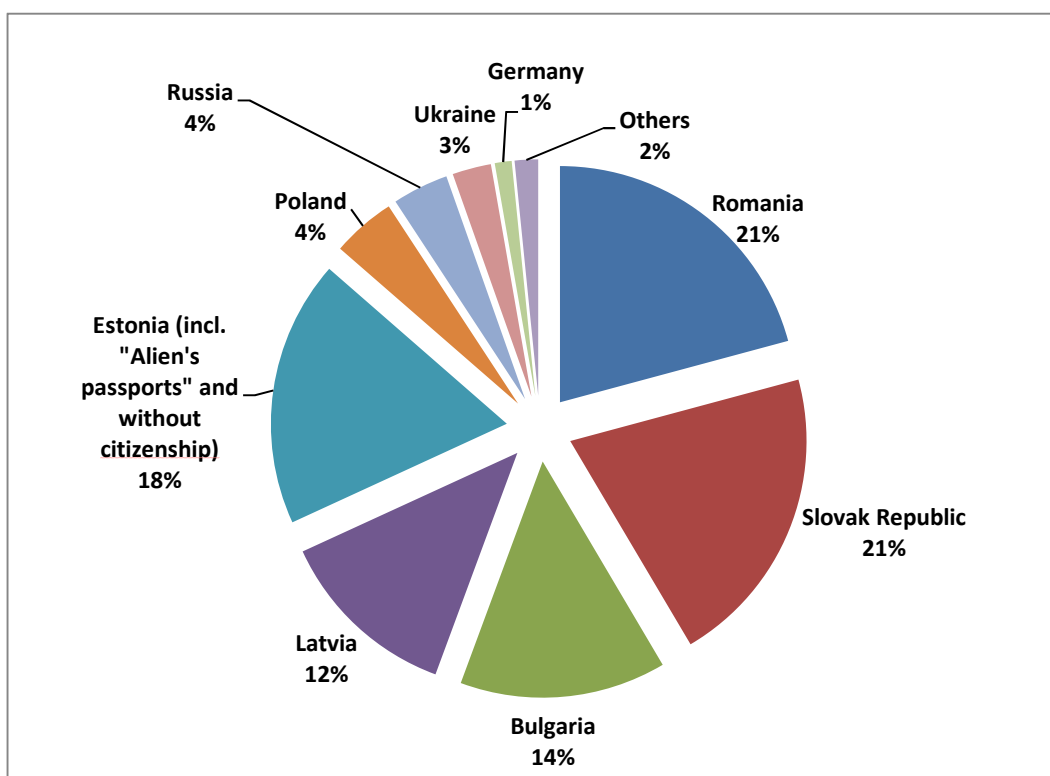


Figure 1: Nationality of survey participants

The most heterogeneous sub-sample by nationality is the German/Polish one, where less than the half of the respondents has a German or Polish nationality (48%, N=50 from 104). The prevailing majority there were sex workers with a migrant background: Ukrainian, Bulgarian, Romanian, or Hungarian among others.

There was a notably high number of sex workers with Roma minority ethnic background in the survey sample: 18.7 % (n=179 from 956). Highest proportions indicated the sub-samples in Romania (more than 50%, N=105 from 200) and Bulgaria (35.8%, N=43 from 120). The ethnic community of the Russians in Estonia was strongly represented in the country's sub-sample as well. 78% (N=164 from 210) of the women interviewed there being Russians and only 13.3 % (N=28 from 210) - Estonians. The majority had Russian citizenship, 'alien' passport or lived in Estonia without citizenship.

Almost one fifth (18.8%, N=179 from 950) of the sex workers having different nationality than the one in the survey country reported to have difficulties with the language in this country, speaking it only a little or not at all.

Age

The largest group with 24.4 % (N=230 from 944) were between 25 and 29 years old at the time of the interview. Second largest group was that of the 30 to 34 years old, counting for 22.4% (N=211 from 944) of the respondents.

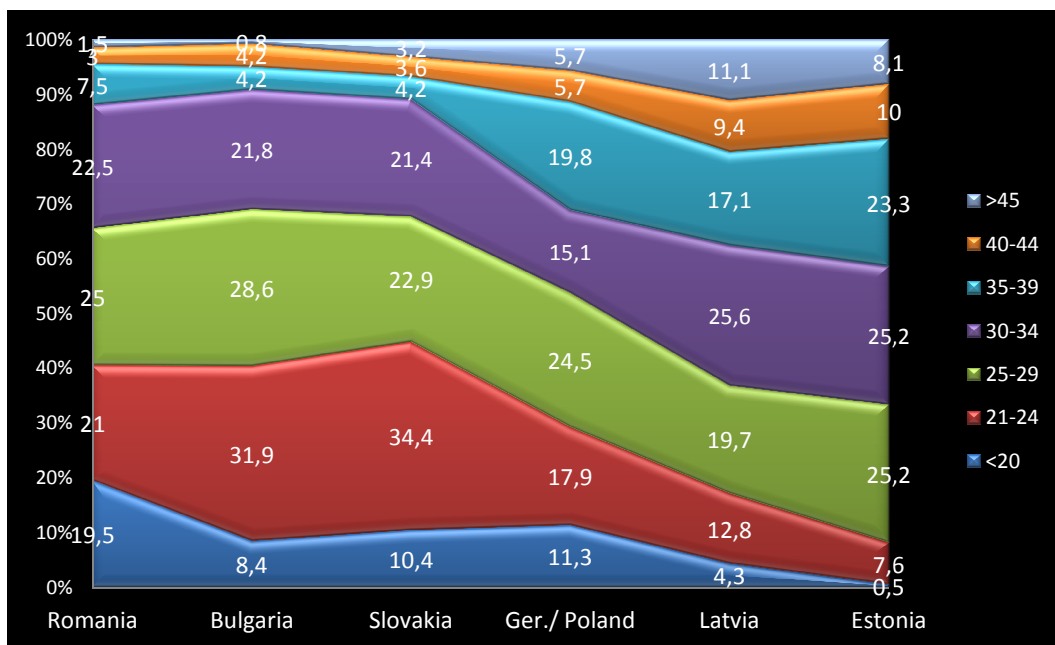


Figure 2: Age groups of survey participants per survey location

The median age of the participating sex workers was 29.5 years (range 13-58 years); similar to the median age of the respondents in a German survey (30 years) on HIV/STI among sex workers in Germany [10], with an average of three years higher than the median age of the sex workers (26 years) in the London survey [3] and slightly lower than the median age (32 years) of the respondents in the Netherlands survey [4].

Highest median age had the sex workers in Tallinn (33 years) and Riga (32 years), lowest in Bratislava (25 years) and Sofia (26 years). Overall less than 5% of the sex workers (N=46 from 944) were older than 45 years at the time of the interview. Most of them came from Latvia and Estonia. The youngest sex workers (younger than 21 years), composing 9.2% (N=87 from 944) of all participants were enrolled mainly in Romania, Germany/Poland and the Slovak Republic.

Partnership and Family situation

The largest part of the respondents were single (34.5%, N=328 from 951), followed by those married or with a steady partner with whom they lived (30.2%, N= 287). More than 10% (12.2%, N=116) were separated, divorced or widowed.

One fourth of the respondents stated that they lived with their partner (25.7%, N=246 from 956). 23% (N=220) lived with their children and/or the children of their partner/s. More than 20% (26.6%, N=207) lived with their parents and/or other family members. About 19 % (N=185) lived by themselves, 15% - with other sex workers (N=141), or with friend/s (5.9%, N=56).

The half of the respondents had children (50.2%, N=474 from 945), with largest shares in Estonia, Latvia and Bulgaria. Half of those with children (51.6%, N=244 from 473) have only one child while 30.7% (N=145) have two children. The childless respondents came mostly from the Slovak Republic (80.4% of the country sample, N=160 from 199, had no child) and Romania (53.3%, N=105 from 197)

Education

Almost the half: 49.2% (N=468 from 952) had a middle or secondary school certificate with highest proportions of these in Bulgaria (74.8%, N= 89 from 119) and Latvia (74.3%, N=87 from 117). 18% (N= 172) had vocational qualification or a high school/university degree. Hereby the highest proportion had the respondents in Estonia (44.8%, N=94 from 210) and Germany/Poland (42%, N=45 from 107).

Almost a third (32.6%, N=310) of the SWs had no education degree or a primary education certificate. Most of them were interviewed in Romania (67.1%, N=133 from 198) and the Slovak Republic (59.2%, N=119 from 201).

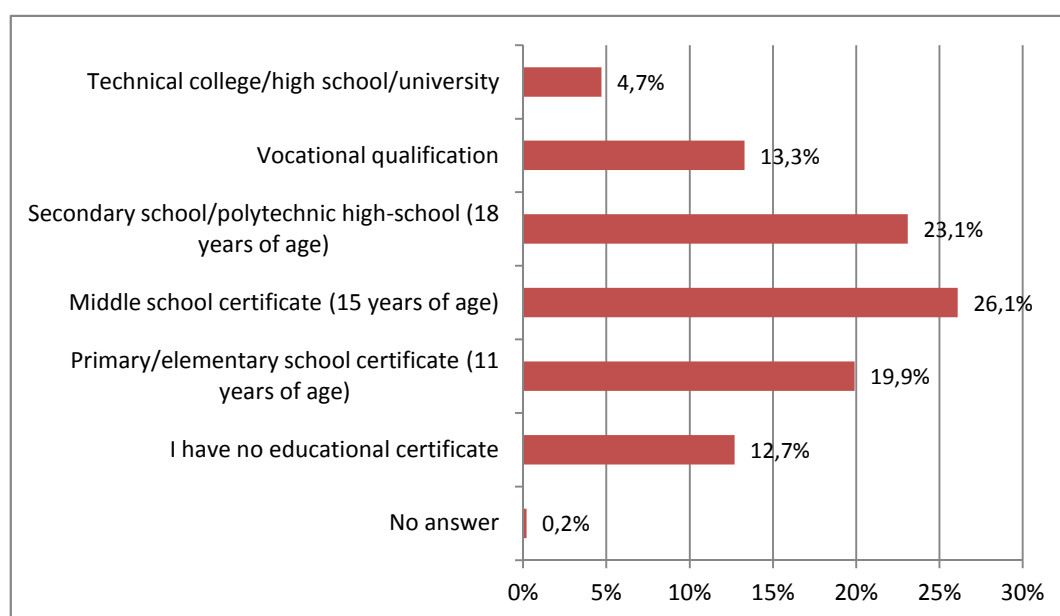


Figure 3: Education grade of survey participants

Occupation and earnings

77.6% (N=740 from 953) subsisted only of sex work in the past year. 46% of those who had another earning source than sex work in the past month (N= 98 from 213) reported

that this source brought less than the half of their monthly incomes, meaning that sex work incomes were at least equally important.

More than three quarter had no other occupation (77.3%, N=734 from 949). Highest proportions among this subgroup showed the respondents in Romania, the Slovak Republic and Estonia. Scarce 10% (N=103 from 949) have a part- or a full-time job outside of sex work with largest shares in Estonia, Latvia, Poland/Germany and Bulgaria. Minor 3% (N=28 from 949) reported to be self-employed, coming mainly from Latvia and Poland.

The other occupations mentioned by the respondents beside the sex work were in cleaning services (N=33 from 212), bars (waitress/bar tender, N=28), shops (assistant, N=26) among others.

More than the half (55.3%, N=529 from 950) supported one or more persons with their incomes. Hereby the respondents in Estonia, Bulgaria and Romania had the largest shares.

8.2 Sex work experience and circumstances

Years of experience

The largest group of respondents (46.1%, N=441 from 956) had between three and 10 years experience in the sex work. Second largest was the group of sex workers with experience between one and three years (24.2%, N=231). Median years of experience in sex work is four years, highest median (5 years) showed the sex workers in Latvia and

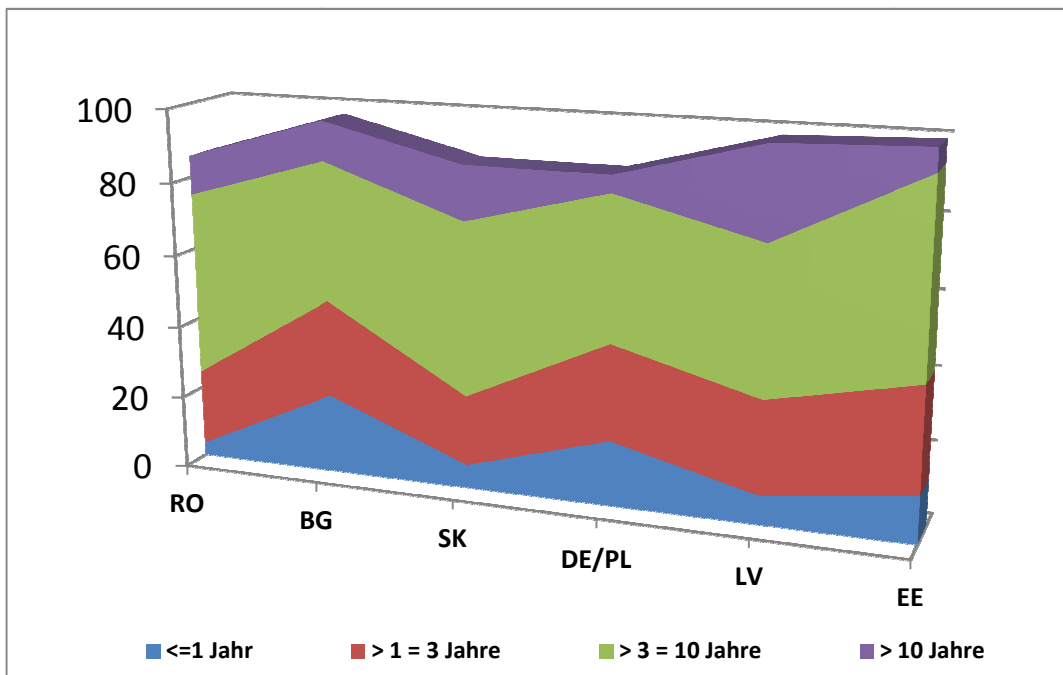


Figure 4: Years of experience with the sex work per survey location

the lowest (3 years) - in Germany/Poland. 13% (N=125 from 956) of the sex worker have worked more than 10 years in the job, with largest shares in Latvia (24.8%, N=29 from 117), Romania (17.5%, N=35 from 200) and the Slovak Republic (14.9%, N=30 from 202). Contrastingly, about 10% (N=101 from 956) were 'newcomers' in the sex work, with less than one year of experience. Bulgaria (21.7%, N=26 from 120), Germany/Poland

(17.8%, N=19 from 107) and Estonia (12.9%, N=27 from 210) indicated the highest proportions of respondents with shortest experience in the sex work.

Age at first experience

The largest group of survey respondents (38.3%, N= 365 from 956) was between 18 and 24 years old when getting started with sex work in exchange of money, goods, drugs or presents. The median age at first sex work experience was 20 years. At highest was the median of the sex workers interviewed in Tallinn (25 years), at lowest – in Bratislava and Bucharest (17 years). Almost 30% (N=283 from 956) of the respondents were younger than 18 years at their start with sex work, with highest proportion of Romanians and Slovaks among them. 7.6% (N=72 from 952) of the women had started even at adolescence age (between 10 and 14 years), with a pronounced majority of Romanian sex workers among them (N=46 from 72).

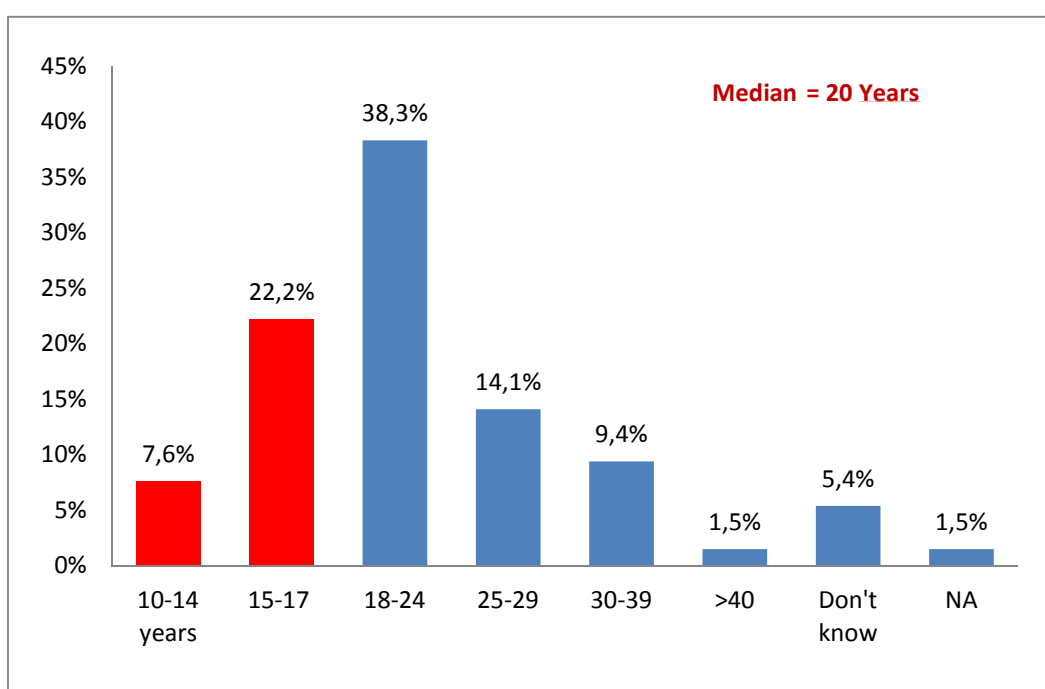


Figure 5: Age at first experience with sex work

8.3 Mobility in the sex work

More than two thirds of the survey respondents (67%, N=641 from 956) had never been paid for sex work in other places beside the survey city. This indicates in general a low mobility level of the sample, both country- and cross-country. Less than a fourth (23.8%, N=228) had worked in sex work in other cities within country they had been interviewed. Slightly more than a fifth (22.6%, N=217) had sex work experience abroad. Among the mobile sex workers with experience abroad, the highest proportion had the respondents interviewed in Estonia (N=64 from 216) and Bulgaria (N=36 from 216) followed by the Romanian and Slovak ones (equally N= 33).

The patterns of sex work cross-border mobility outlined were of moderate frequency. Over a fourth (25.7%, N=53 from 206) of those who reported to have travelled abroad for

sex work in the past year had done that only once, another 24.3% (N=50 from 206) -twice and 16% (N=33 from 206) - every three to four months.

Conspicuously, however small as a group, those who travelled abroad reported a large number of countries (N=15), visited for paid sex work. Some clear geographical patterns could be outlined regardless of the data missing on frequency of the mobility in each of the countries.

Thus Austria, Italy and Hungary were the three most frequently reported countries of destination for the Slovak SWs; while Germany and Greece were pointed out as most important destination by the Bulgarian respondents. The Romanian and Latvian SWs travelled at most to Germany and Italy, while the Romanians travelled also to Spain. The SWs interviewed in Poland referred also to Germany as the most often country of destination. The neighbouring Nordic countries (Finland, Norway and Sweden) were the most often chosen destination by the Estonian SWs.

As being already pointed out Germany was an often visited country for sex work. The women interviewed there pointed on their turn Italy, Poland and Switzerland as countries visited for sex work. Obviously several of the survey countries can be designated as both transit and destination countries.

8.4 Substance use experience and circumstances

Alcohol use

With regard to the recent alcohol use more than 30% (31.4%, N=300 from 955) of the sex workers responded that they had not taken drugs at all in the past month. Less than a fourth (23%, N=220 from 955) had drunk every day or almost every day in the past 30 days.

Looking at the alcohol use before or during sex work in the past month the figures seem slightly different. 27.9% (N= 182 from 653) of those who reported any alcohol use in the previous 30 days stated that they had regularly (every day/almost every day) taken one or more drinks before or during sex work.

The combination of sex work and alcohol use was confirmed by the findings presented below to be a risk predictor as for safer sex and prevention of STIs.

Drug use

An ample half of the survey respondents had made experience with drugs: 52.9% (N=504 from 952) had ever used any substance. Unsurprisingly, more than the half of those who had ever used substances were active users at the time of the survey: 56.9% (N=286 from 503) had used drugs every day/almost every day in the past month.

Regretfully not all of them (N=503), but 381 respondents provided data on their drug use behaviour before or during sex work, which is another influential risk predictor. However the data collected outlined a stable subgroup of active drug users within the survey sample. 71.9% (N = 274 from 381) of those who reported drug use before or during sex work had done this daily/almost every day. A multiple-answer item collected data on the types of substances used in the past month. The three substances with highest frequency of use reported were: amphetamines (45.4%, N= 229 from 504), heroin (43.7%, N= 220 from 504), and cannabis (16.9%, N=85 from 504).

Injecting drug use

The explicit indications for an overlap between the groups of sex worker and IDUs were confirmed with a consciously high level of overlaps in two survey locations. Almost 38% of all respondents (37.8%, N=361 from 956) have ever injected drugs. Hereby, largest shares of IDUs in their sex worker sub-sample showed the Slovak Republic (almost 90%, N=181 from 2020), Latvia (almost 70%, N=81 from 117) and Romania with however far smaller share (31%, N=62 from 200). Contrastingly less than 1% (N=1 from 107) of the sex workers interviewed in Germany and Poland had injecting drugs experience. Three fourths (77.3%, N=279 from 361) of the sex workers, who had ever injected drugs, had done this during the last seven days prior to the survey.

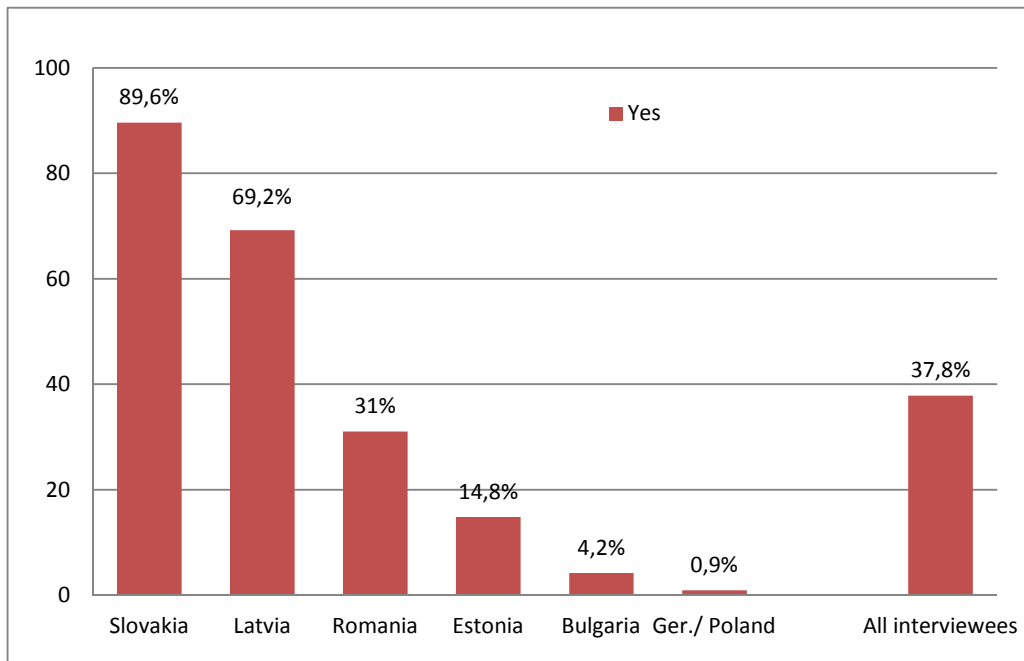


Figure 6: Experience with injecting drugs per survey location

With such a high proportion of active IDUs, the findings disclose a structural disproportion of the studied sample. This was obviously caused due to the distinctive drug users segments within several of the sex work scenes being overrepresented in the survey. Due to that reason the findings below should be cautiously interpreted taking account of this sample's feature and moreover by the comparisons across the survey countries.

Looking in depth in the drug use-related risk exposure among the IDU sex workers some further finding emerge as quite appalling.

Almost 40% (38.8%, N=140 from 361) of the sex workers who had ever injected drugs showed risk resilience: they had never used a syringe or a needle already used by someone else. Though almost a third (32.1%, N=116 from 361) had used unsterile syringe or a needle in the course of the past six months, whereas 10.2% (N=37) had done this in the course of the past seven days. All of those respondents but one (N=115) were interviewed in the Slovak Republic, Romania or Latvia.

Concerning is the fact that almost 7% (N=25/11 of whom in Latvia from 361) from the IDU respondents reported to had used an unsterile syringe/needle the last time they had injected (UNGASS indicator 21). Low-threshold and largely accessible harm reduction services are a minimum standard of good prevention practice among IDU clients. Considering that the data disclosed a strong limitation of the scope and reach of the available pre-

vention measures for that most-at-risk group. Worrying high is the number of those who stated that they had not been given sterile needles and syringes in the past 12 months (UNGASS indicator 9): 14.1% (N=51 from 362).

8.5 Access to health care, HIV/STI/sexual health services

Health insurance

Concern raises the finding that 60% (N=571 from 952) of the respondents had no health insurance at the time of the interview. The countries with the highest proportions of sex workers without a health insurance among the respondents were Romania (93.9%, N=186 from 198), Estonia (64.1%, N=134 from 209), and Bulgaria (62.5%, N=75 from 120). Reversely in Latvia 94.9% (N=111 from 117) of the respondents had a health insurance as well as more than the half (56.1%, N=60 from 107) of those in Germany/Poland.

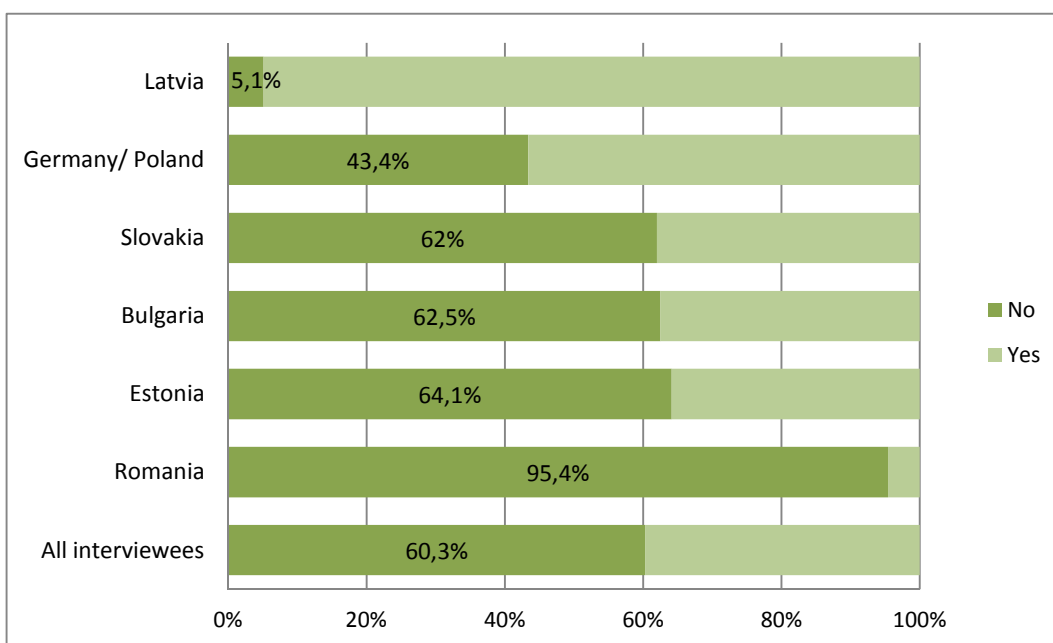


Figure 7: Proportion of respondents without health insurance per survey location

HIV voluntary counselling and testing (VCT)

To the question whether they know where to go personally for an HIV test 90% (N=834 from 925) of the sex workers responded affirmatively (UNGASS indicator 9). Although not very high the proportion of those (10%, N=91 from 925) who did not know that, suggests that the scope of information on available and accessible VCT offers should be optimised.

59% (N=560 from 949) had received an HIV test in the past year, a result confirming a stable level of uptake of the available HIV VCT offers (UNGASS indicator 8).

Against the background of almost mainstreamed low-threshold HIV-diagnostic services for most-at-risk groups, concern raises the finding that 16% (N=152 from 925) had never been tested for HIV. Largest proportions of sex workers who had never had an HIV test were identified in the sub-samples in Germany/Poland (33%, N=34 from 103) and in the Slovak Republic (31.2% , N=63 from 202)

The reasons for not having been tested so far for HIV outline clear indicators of risk. 25.7% (N=39 from 152) of those never tested for HIV suggested that they did not think to be

at risk. Equal shares (each 18.4%, N=28 from 152) had never thought about the test or were afraid of the result. In addition, some of those never tested for HIV did not know where to go for a test (17.8%, N=27 from 152). Almost 10% (N=15 from 152) were afraid they would be treated badly or their identity of a being sex worker would be disclosed.

With regard to the last HIV test, worrisome is the finding that almost a fifth (19.1%, N=178 of 931) reported that they did not voluntarily asked for the test, but were required to do so. Most often mentioned persons/reason was: medical doctor/hospital treatment, partner/husband or a test during pregnancy. Some respondents reported that employer or a client required from them to undergo an HIV test.

Most often the last HIV test was performed at a mobile medical unit: in 28.6% (N=228 from 797) of the cases, followed by a specialised HIV testing and counselling service (23.6%, N=188) and a hospital/clinic as an out-patient unit (16.1%, N=128). Almost all of those who ever tested for HIV (97.4%, N=772 from 793) received their test result (UN-GASS indicator 8). Besides, a large number of respondents confirmed that they had received pre- (86.3%, N=691 from 801) and post- (81.8%, N=603 from 737) test counselling according to the VCT standards.

STI/sexual health services

While the findings with regard to uptake of HIV counselling and testing offers look almost reassuring, the data on STI-services uptake is far more disquieting. 78.1% (N=704 from 901) of the sex workers had not attended a STI-specialist (eg, dermato-venerologist) in

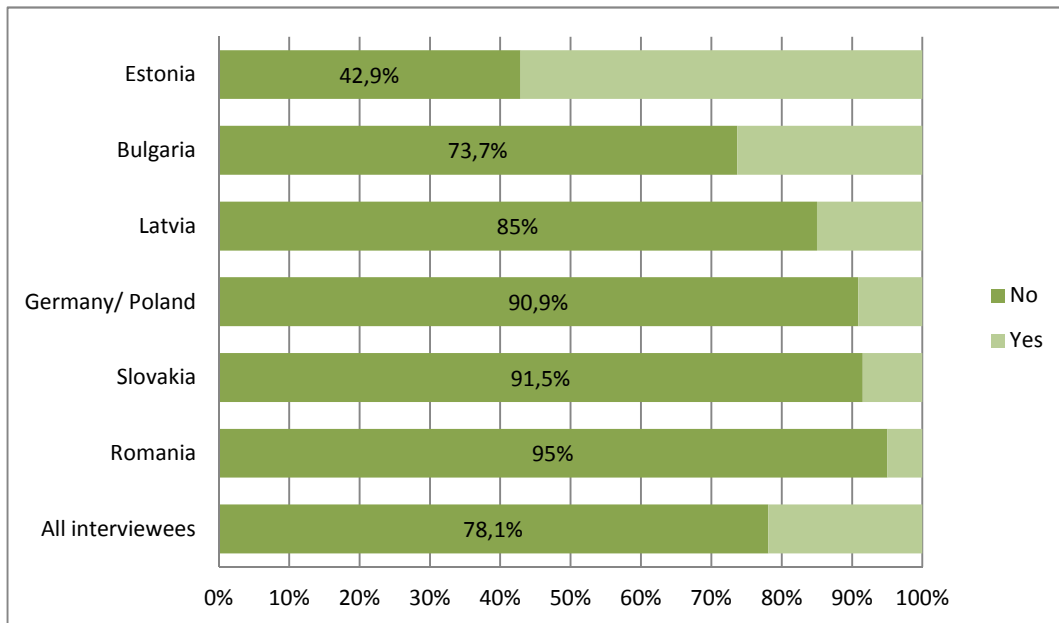


Figure 8: Proportion of respondents who had not visited an STI specialist in the past twelve months per survey location

the past year. Hereby the respondents in Romania (95%, N=189 from 199) and the Slovak Republic (91.5%, N=182 from 199) had the largest shares. Contrastingly only 42.9% (N=88 from 205) of the sex workers interviewed in Estonia had not visited an STI-service in the past year.

At the same time almost a fourth of the respondents (22.8%, N=215 from 944) stated to have had some symptoms or suspicion of an STI in the past 12 months. With 42.9%

(N=90 from 210) the sex workers interviewed in Estonia had highest shares among the respondents who had had experience with an STI (symptoms/suspicion) in the past year, followed by those in Latvia (23.9%, N=28 from 117).

Out of the sex workers with a self-reported STI anamnesis more than the half (56.7%, N=122 from 215) had visited a physician alone, further 6.5% (N=14) had done that together with their partner.

Evidently, the group of sex workers who attended an STI-service in the past year is composed mostly by those who had experienced some symptoms and/or had suspicion of an STI. Frequency of reported STI infections was associated with frequency of visit of STI services by other behavioural surveys among drug-using women, including sex workers. Self-reported STI anamnesis was highest among the sex workers [11].

Against the background that many STIs are asymptomatic in women, the IBBS survey finding appears as even more worrisome. Moreover, being asked to describe symptoms of STIs in women, 14% (N=134 from 956) of the respondents stated that they could not describe any. A health-care seeking behaviour based majorly on waiting up the symptoms manifestation carries heightened risks for the affected persons, related to late diagnosis and spread of an untreated infection.

With regard to the uptake of services for sexual and reproductive health, less than the half (48.9%, N=464 from 948) had attended a gynaecologist/family planning specialist in the past year. Largest shares of sex workers who had attended a sexual/reproductive health specialist indicate the survey sub-samples in Bulgaria (80%, N=96 from 120) and Latvia (66.7%, N=78 from 117). Reversely, 74% (N=148 from 200) of the respondents in Romania and 61% (N=122 from 200) of those in Slovak Republic had not attended such specialist/service.

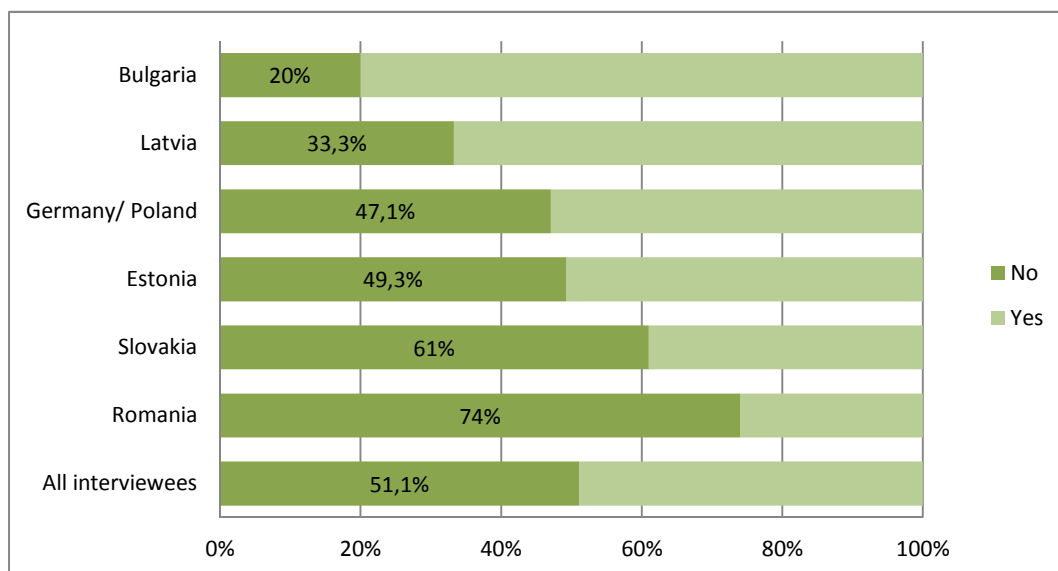


Figure 9: Proportion of respondents who had not visited a gynaecologist/sexual health/family planning specialist in the past 12 months per survey location

Looking at the main reasons for non-attendance reported by the respondents, the lack of health insurance can be outlined as the major one: referred to by 41.7% (N=202 from 484) of those who had not visited sexual health service in the past year. Considering that in most of the country contexts, in the case of lacking health insurance the only alterna-

tive is to pay for the respective service, for 19% (N=92 from 484) of the respondents the lack of resources to pay for the visit was the main reason of non-attendance.

Alongside with the consistent use of contraception, the experience with abortion bears clear implication as risk factor for the sexual and reproductive health of the respondents. With 59% (N=557 from 944) a considerable number of respondents had had experience with abortion, whereas 55.8% of them (N= 311 from 557) had already had two or more abortions.

This finding, complemented by the low level of usage of the respective sexual/reproductive health services raises further concerns. Looking at the methods practiced for pregnancy protection in the past year, the condom emerged as the most preferred contraception, far and away first choice for 82.9% (N=793 from 956), followed by the oral contraceptive pill (15.2%, N=145 from 956). Still, 7% (N=67) of the respondents stated that they had not used any protection against pregnancy in the past year.

8.6 Commercial sex services, sexual and other risks

Commercial/paying clients

The interviewed sex workers reported a range of one to over 50 paying clients in a normal week, with a median of 20 clients. Strongest deviations of the medians can be observed by the sub-sample in Latvia (5 clients per week) and the sub-samples in Romania and the Slovak Republic (each 30 clients per week). Three quarters of the survey respondents (75.7%, N=721 from 952) reported ten and more paying clients per week, which was the case for almost all Slovak and Romanian sex workers (respectively: 99%; N=200 from 202 and 95%; N=190 from 200), but for less than a third of the Latvians (29.9%, N=35 from 117).

Almost a third of the respondents (32.3%, N=304 from 940) reported extremely low level of regular clients: none or one of the last ten paying clients had been respectively regular ones. For a bit more than 40% (41.9%, N=394 from 940) the regular clients made up between 20 and 40% (two to four of the last ten). Only a very small group of respondents (5.9%, N=55 from 940) worked predominantly with regular clients (eight to ten of the last ten clients).

Conspicuous is the finding with regard to the clients' demand for sex without a condom. More than 30% (31.7%, N=298 from 940) of the respondents stated that none of their last 10 clients asked for unprotected sex. For another 30 % (31.8%, N=299) only between two and four of the last ten clients demanded for sex service without a condom. Just a minor group of respondents (4.7%, N=44) referred to almost each or each of the last ten clients as demanding for unprotected sex.

Condom use by paid sex services

In line with the finding above, the vast majority of survey respondents (92.4%, N=878 from 950) stated that they had used a condom with their most recent client (UNGASS18). Some clear differences could be observed among the sub-samples in the different survey locations. While all of the sex workers in Bulgaria (100%, N=119 from 119) reported condom use with their most recent client, only 84.7% (N=171 from 202) of those in the Slovak Republic and 85.5% (N=100 from 117) of those in Latvia did that.

Hereby, in line with the expectations the injecting drugs practice of the respondents plays a role as a risk enhancer. On the one hand, the large majority of the IDU sex workers (87.5%, N=316 from 361) reported that they had used a condom with their last client. On the other, more than 60% of the respondents who had not used a condom with their most recent client (N=43 from 68) had injecting drug experience.

Studying closely the patterns of condom use with over a period of time (frequency in the past month) the consistent condom use (defined as 'every time') by various sexual practices was checked.

Inconsistent condom use (defined as 'mostly, or half of the time or rarely') by oral sex with commercial clients in the past month was reported by a good third of the respondents (36.8%, N=342 from 930). However, more than 60% of all sex workers in Romania (63.3%, N=126 from 199) and the Slovak Republic (60.4%, N=122 from 202) used condoms by oral sex only inconsistently. Over a fifth (22%, N=206 from 936) reported inconsistent condom use by vaginal sex in the past month. Here again, highest shares of respondents with such risk practice showed the Slovak Republic (49.2%, N= 95 from 193) and Romania (36.2%, N= 72 from 199), followed by Latvia (19.3%, N=22 from 114). From all 484 respondents who provided data on anal sex practiced with paying clients in the past month, 30.6% (N=148) used condoms inconsistently.

In contrast with the relatively high and stable level of self-reported condom use with the most recent client, the more differentiated data on condom use frequency brings more light into the underlying risks in the daily sex work practice.

8.7 HIV/STIs prevalence

The results of the blood screening tests indicated HIV prevalence of 4.6 % (N=44 from 955). Highest prevalence was outlined among the respondents in Latvia (22.4%), whereas 20 of the 26 respondents tested as HIV-positive, knew about their HIV status. Almost all of the HIV-positive results were identified among IDU sex workers (97.7%, N=43 from 44). Similarly the Hepatitis C prevalence, being 24% (N=229 from 956) for the whole sample, showed a peak of 58.1% in Latvia (N=68). Here again 90.4 % (N=207) of the Hepatitis C positive respondents were IDUs. A similar bio-behavioural survey among female drug injecting sex workers in Glasgow outlined HCV prevalence of 64%, whereas 98% of those who had tested positive had ever injected drugs [12]

The detected overall prevalence of Syphilis in the survey sample was 4.6% (N=44 from 954). Highest prevalence was outlined in Romania, 12% (N=24). The prevalence of Hepatitis B was 6.2% (N=59 from 950), with highest one in Romania (12.5%, N=25).

	Prevalence (all respondents)	Highest prevalence in:
HIV	4.6% (N=44 from 955)	Latvia – 22.4 % (N=26 from 116, 20 of them with known HIV- positive status)
SYPHILIS	4.6% (N=44 from 954)	Romania – 12% (N=24 from 200)
HEPATITIS C	24% (N=229 from 956)	Latvia – 58.1% (N=68 from 117)
HEPATITIS B	6.2% (N= 59 from 950)	Romania – 12.5 % (N=25 from 200)

Table 2: Prevalence of HIV and STIs

In a multivariate analysis (logical regression, SPSS.20) risk predictors for three of the infections were outlined. Thus sex work in Romania and Latvia (OR=5.65, $p<0.01$), non-consistent condom use (any other reported frequency of use except 'always') by vaginal sex with paying clients in the past month (OR= 2.92, $p<0.01$), and experience with injecting drugs (OR= 2.74, $p<0.05$) were associated with Syphilis.

Similarly, prevalence and odds of infection with Hepatitis B were higher among sex workers in Romania and Latvia (OR=2.41, $p<0.01$) and among those with non-consistent condom use by vaginal sex with paying clients.

Syphilis		Hepatitis B		Hepatitis C	
Sex work in Romania and Latvia	5.65**	Sex work in Romania and Latvia	2.41**	Ever injected drugs	43.78**
Non consistent condom use (1) /vaginal sex /paying clients/ last month	2.92**	Non consistent condom use (1)/vaginal sex / paying clients/ last month	2.02**	Non consistent condom use (1)/oral sex /paying clients /last month	2.79**
Ever injected drugs	2.74*			Regular(2) alcohol consumption/ before or during sex work/last month	1.80*

* significant ($p<0.05$)

** highly significant ($p<0.01$)

(1) mostly, half of the time, rarely, never or no answer

(2) one or more drinks every day/almost every day

Table 3: Risk predictors (OR) for specific infections

Unsurprisingly injecting drug experience (OR=43.78, $p<0.01$) was strongly associated with Hepatitis C. At the same time odds for Hepatitis C were higher among the sex workers with non-consistent condom use by oral sex with paying clients (OR=2.79, $p<0.01$) and among those having used alcohol regularly ('every'/almost every day') before/during sex work in the past month (OR=1.80, $p<0.05$).

IX. Summary of major findings per survey location

9.1 Bulgaria (N=120)

The Bulgarian sample consists of 120 female sex workers making up 17.4% of the respondents. Their median age is 26 years (mean: 27.3 years, N=119). One third of them (N=43, 35.8%) was with Roma minority ethnic background. Highest proportion of the Bulgarian sex workers has a secondary school (40%, N=48) or middle school (34.2%, N=41) certificate. Only 10.8% (N=13) received primary school diploma and 9.2% (N=11) have no certificate. The main part of the women (41.7%, N= 50) live together with their steady partners and the second largest group are singles (28.3%, N=34). More than the half (60.8%, N=73) have one or more children.

Most of the women (70%, N=84) lived only off their earnings from sex work in the last year, 75.8% (N=91) have no other occupation and about 79.2% (N=95) support one or more people with their earnings. Nearly half of the participants (48.4%, N=58) have less than 3 years and 38.3% (N=46) have between 3 and 10 years experience in sex work. Most of the women were between 18 and 24 years old (54.2%, N=65) when they started with prostitution and 21.7% (N=26) were under 18 years. The majority (69.2%, N=83) has never worked abroad. The most frequently named countries of destination are Germany, Greece and Belgium. Only few sex workers ever injected drugs (4.2%, N=5).

Almost all Bulgarian sex workers reported consistent use condom during vaginal sex (96.7 %, N=116) as well as during oral sex (87.5%, N=105). Many of the women (55%, N=66) have had one or more abortions.

More than the half of the Bulgarian participants (N=75, 62.5 %) have no health insurance. 80% of them (N=96) reported that they have visited a gynaecologist, 81.4% did a HIV test but 73.7% (N=84, from N=114) have not visited a STI-service in the last year. The prevalence of Hepatitis B is 5.8% (N=7), of Hepatitis C is 4.2% (N=5) and of Syphilis is 2.5% (N=3). The HIV-Tests are by all Bulgarian participants negative.

9.2 Estonia (N=210)

The Estonian sample consists of 210 female sex workers. Their median age is 33 years (mean age: 33.4 years, N=210). 39% (N=82) of the interviewees have the Estonian citizenship, more than one-fourth have an Aliens passport (27.6%, N=58) and 15.2% are stateless (N=32, N=210). More than three-quarter of the women are ethnic Russians (78.1%, N=164, N=210).

The vast majority of the sex workers has a vocational qualification 40% (N=84) or a secondary school diploma (36.7% (N=77 from N=210)). Nearly three-quarter of the respondents is single (73%, N=34.8), the second largest group of 17.6% (N=37 from 210) is separated. Nevertheless, the majority of the women has children (63.5%, N=132 from N=208) and support someone else with their earning (65.4%, N=136 from N=208). A vast majority (81.9%, N=172 from N=210) live only off their earnings from sex work. More than two-thirds of the interviewees has never worked in another country (N=144 from 208). The most frequently named countries of destination are Finland, Norway and Sweden.

7.2% (N=15 von 208) of the questioned persons started with sex work when they were younger than 18 years old, 72.4% do sex work since five years or less (N=152 from 210). Almost all Estonian sex workers reported consistent condom use during vaginal sex 96.6% (N=202 from N=209) as well as during oral sex (81.7%, N=165 from N= 202).

The majority of the sex worker has no health insurance (64.1%, N=134 from N=209) and more than half of them already had one or more abortions (59%, N=124 from N=210). 14.8% of the respondents ever injected drugs (N=31 from N=210). Half of the women (50.7% N=106 from N=209) reported that they have visited a gynaecologist, less than one-third did a HIV test (32.6%, N=68 from N=209) and 57.1% (N=117, from N=205) have visited an STI-service in the last year.

The prevalence of HIV is 6.2% (N=13 from N=210), of Syphilis is 1% (N=2 from N=209), of Hepatitis B is 1.4% (N=3 from N=210) and of Hepatitis C is 5.7% (N=12 from N=210).

9.3 Germany/Poland (N=107)

The sample from Germany/ Poland consists of 107 female sex workers from different nationalities. The most common nationalities in this region are Polish (36.4 %, N=39), Ukrainian (18.7%; N=20), Bulgarian (15%, N=16) and German (10.3%; N=11). The median age of the women is 28 years (mean= 29.85). Many of them are singles making up 33.6% of the respondents (N=36). Compared with other regions, there are only 14% (N=15) who have steady partner and many who are separated (N=23, 21.5%). More than half of the women (61.7%, N=66) has one or more children. Highest proportion of the respondents has a vocational qualification or high school diploma (42%, N=45) with middle school certificate are 21.5% (N=23) and 7.5% (N=8) have no certificate.

74.8% of the women (N=80) lived only off their earnings from sex work in the last year, about the half of them (49.5%, N=53) have no other occupation and two-Thirds of them (75.7%, N=81) support one or more people with their earnings. Sex workers in the German region most frequently named as countries of destination are Poland, Hungary, Italy and Switzerland. In the Polish region the three most popular countries of destination are Germany, Poland, Bulgaria and France.

44% of the participants (N=47) have less than 3 years and 39.3% (N=42) have between 3 and 10 years experience in sex work. The median age at the start with sex work is 23 years. 38.3% (N=41) were between 18 and 24 years old when they received for first time money, drugs, goods or presents for sex and 14% (N=15) were under 18 years when they started with prostitution. Only 0.9% (N=1 from 107) reported that they ever injected drugs.

More than the half of the sex workers (56.1 %, N=60) have a health insurance and reported that they have visited a gynaecologist in the past year (52.9%, N=54, from N=102), whereas 42.8% did a HIV test and 9.1% visited a STI doctor (N=7 from N=77). The majority of the questioned women use condom consistently during vaginal sex (90.4%, N=104) as well as during oral sex (80%, N=80). Many of the women (54.2%, N=58) had once or more times an abortion.

The STI prevalence rates in this region are very low: 3.4% (N=4) of Hepatitis C, 2.8 % (N=3) of Hepatitis B and 0.9 % (N=1) of Syphilis. The HIV-tests were all negative.

9.4 Latvia (N=117)

The Latvian sample consists of 117 female sex workers. Their median age is 32 years (mean age: 32.9 years, N=117). Except for one person all of them have the Latvian citizenship 99.1% (N=116 from N=117) whereby almost 40% of the interviewees are ethnic Russians (N=46 from N=117). The vast majority has a secondary school diploma (42.7%, N=50 from N=117) or a middle school diploma 31.6% (N=37). The largest group of 30.8% (N=36) is single, the second largest group of 27.4% (N=32 von 117) lives together with their steady partner. The majority of the women has children (61.5%, N=72 from 117). 40% support someone else with their earning (N=48 from N=117) and live only off their earnings from sex work (N=47, N=117). More than three-fourths of the interviewees has never worked in another country (N=92 from 117). The most frequently named countries of destination are Germany, Italy and Denmark.

Almost one fourth of the questioned women started with sex work when they were younger than 18 years old (23.1%, N=27 from N=117); 4.3% (N=5) were even between 10 and 14 years old. Almost half of the women do sex work since five years or less (48.7%, N=57 from 117). A strong majority of the Latvian sex workers reported consistent condom use during vaginal sex (77.9%, N=88) and more than the half of the women used always condoms during oral sex (55.1%, N=59, N=107).

Nearly all sex workers have a health insurance (95%, N=111 from 117). More than half of them (59.8%, N=70 from N=117) had already one or more abortions. More than two-thirds of the respondents ever injected drugs (69.2%, N=81 from 117). 66.7% of them (N=78) reported that they have visited a gynaecologist, 35% (N=41) did a HIV test and 15% (N=16 from N=107) visited an STI-service in the last year.

The prevalence's of HIV is 22.4% (N=26 von N=117), of Syphilis: 5.1% (N=6 from N=117) and of Hepatitis B is 4.3% (N=5 von N=117). The prevalence of Hepatitis C is very high: more than half of the women (58.1%, N=68 von N=117) were tested positively.

9.5 Romania (N=200)

The Romanian sample consists of 200 female sex workers. Their median age is 36.5 years (mean 26.9 years, N=200). Except for one person all of them have the Romanian citizenship (99.5%, N=191 from N=192) and nearly half of the interviewees (46.5%, N=93 from N=200) belong to the Roma ethnic minority. The majority has a primary school diploma (32.8%, N=65) or no school certificate (34.3%, N=68 from 198). Half of the women (52%, N=104 von N=200) is single, the second largest group of 26% (N=52 von 200) live together with their steady partner. A scare majority of the sex workers has no children (53.3%, N=105 from 197) and supports someone else with their earning (56.8%, N=113 from 199). A vast majority of 92% (N=184, N=200) lives only off their earnings from sex work and has never worked in a different country (83.5%, N=167 from 200). The most frequently named countries of destination are Germany, Italy and Spain.

The majority of the questioned women started with sex work when they were younger than 18 years old (60.7%, N=105 from 173) and one-fourth of them (27%, N=46) were even between 10 and 14 years old. Nearly half of the women do sex work since five years or less (42%, N=84 from 200). More than half of the sex workers reported consistent condom use during vaginal sex (64%, N=128 from N=200)) and one third during oral sex (35.2%, N=70 from N=199).

Almost none of the sex worker had a health insurance (4.6% N=9 from 195) and 77.1% (N=148 von N=192) had already one or more abortions. Nearly one third of the respondents ever injected drugs (31.2%, N=62 from 199). In the last 12 months 46% did an HIV test (N=92 from N=200), 26% visited a gynaecologist (N=52 from N=200) and 5% visited a dermato-venerologist/STI doctor (N=10 from N=199).

The prevalence of HIV is 2% (N=4), of Syphilis is 12% (N=24) and of Hepatitis B is 12.5% (N=25). The prevalence of Hepatitis C is also pretty high: one fourth (24.5%, N=49 von N=200) were tested positively.

9.6 Slovak Republic (N=202)

The Slovak sample consists of 202 female sex workers. Their median age is 25 years (mean age is 27.1 years, N=202). Nearly all of them have the Slovakian citizenship (96.5%, N=195) and 14.9% (N=30 from N=202) belong to the Roma ethnic minority. Most of the interviewees have a primary (45.3%, N=91) or a middle school (36.3%, N=91 from N=201) diploma. 28% live together with their steady partner (N=56), the second largest group of 24% (N=48 from 199) is single. A very high proportion of the women have no children 80.4% (N=160 from 199), live only off their earnings from sex work (85.6%, N=173 from N=202) and do not support anyone else (72.3%, N=146 from N=202). Furthermore, a large part of the persons questioned has never worked abroad in other countries (83.7%, N=169 from 202). Nevertheless, the most frequently named countries of destination are Austria, Hungary and Italy.

Nearly half of the women worked less than five years as a sex worker (46%, N=93 from 202) and started to work in this field when they were between 15 and 17 years old (47.3%, N=87 from N=184). Almost 5% of them were younger than 15 years old. Nearly all of the women ever injected drugs (94.3%, N=181) and 87.5% (N=168 from N=192) had done this also within the last seven before the survey.

More than half of the sex workers reported consistent condom use during vaginal sex (53%) and one third during oral sex (37.1%, N=202). The majority of the interviewees had no health insurance (62%, N=124 from N=200) and 45.3% (N=91 from N=201) already had one or more abortions. In the last 12 months 61.4% (N=124 from 202) did a HIV test, 39% (N=78 from N=200) visited a gynaecologist and 8.5% (N=17 from N=199) visited a dermato-venerologist/STI doctor.

The prevalence's of HIV is 0.5% (N=1), of Syphilis is 4% (N=8) and of Hepatitis B is 7.9% (N=16). The prevalence of Hepatitis C is very high: 45% (N=91 von N=202) were tested positively.

X. Discussion and conclusions

Feasibility and transferability of the IBBS survey results

For the BORDERNETwork's multi-city cross-section behavioural and epidemiological survey among female sex workers a convenient sample was recruited in seven EU countries. Considering the multiple macro-economical and social factors influencing structure, complexity and fluctuations of the sex work scenes in Europe nowadays, it is hardly possible to estimate precisely the size of the population of sex workers and to implement a cross-country survey in the field based on representative samples. Nonetheless the survey provided plentiful useful data, which can support the national prevention programme planning for this most-at-risk group in the seven EU countries concerned. Despite that the results do not offer an overview of the entire sex work scenes and do not allow for direct comparisons among the participating countries, they brought to light major social, health problems and vulnerability determinants of two specific sex workers groups: out-door sex workers and drugs using sex workers. The key findings and recommendations call for prompt design and implementation of measures tailored to the problems of the sex workers identified by the survey. Moreover the survey results add up to the host of knowledge sizing the European dimension of the phenomenon of prostitution and corroborate the evidence on risk exposure of sex workers to HIV/AIDS, STIs, and sexual health problems.

The survey report concentrated primarily on those findings, which enhance the evidence on the behavioural and structural risks and the prevention barriers for the group of sex workers.

Social and health situation of sex workers in the survey countries

The survey indicated that sex worker groups in the seven study locations differ in many aspects. Sex workers in Romania and the Slovak Republic were the youngest, least educated, started earlier with sex work, had least often another occupation and sources of earning beside sex work. Furthermore a large number of the sex workers in Romania had a Roma ethnic minority background, increasing additionally their vulnerability towards social exclusion.

Due to the numerous social determinants of risk, including the precarious living conditions and poor access to health and social care in combination with various behavioural risks the sex workers in Romania and in the Slovak Republic can be seen as the most vulnerable ones in the BORDERNETwork survey. Given that the vast majority of the Romanian respondents had no health insurance and at the same time showed the highest prevalence and odds for infection with Syphilis and Hepatitis B, urgent low threshold interventions are largely needed for scaled up prevention, diagnostic, treatment, referral and care.

In the Slovak Republic and Latvia the out-door sex worker groups showed a significant overlap with the IDU sex work scene. The Latvian sample group demonstrated the peak in HIV and Hepatitis C prevalence. Against this background tailored interventions for HIV/STIs prevention and diagnostic should be complemented by low-threshold and largely accessible harm reduction and drug-help services as a minimum standard of good prevention practice among IDU clients.

Sex work and mobility

In general the survey indicated a low mobility level of the studied sample, both intra-country and cross-country. Less than a fourth had worked in sex work in other cities within the survey country, and slightly more than a fifth had sex work experience abroad. However, those who travelled abroad reported a large number of countries visited for paid sex work. Respondents interviewed in Estonia and Bulgaria showed the highest sex work mobility abroad. Clear regional geographical patterns could be outlined in this regard. Hereby many Estonian SWs chose the neighbouring Nordic countries (eg, Finland, Sweden and Norway) as their destination country, while Bulgarian SWs preferred to work in Germany.

In contrast to the low mobility level detected in the survey in general, the German/Polish sub-sample demonstrated that mobility and multinationality play an important role in the current prostitution context in EU. The sex worker groups in these two survey countries were the most heterogeneous by nationality, being less than the half of the respondents German or Polish. The prevailing majority were migrant sex workers from Ukraine, Bulgaria, Romania, or Hungary among others. Along with this, several of the survey countries can be designated as both transit and destination countries.

Sex work and access to health services

Low-threshold HIV counselling and testing services for most-at-risk groups seem to be almost mainstreamed in the seven survey countries. However, there is a certain proportion of SWs (10%, N=91 from 925) who did not know where to go for an HIV test. Therefore the channels of information on available and accessible HIV VCT offers should be optimised. Access and uptake of STI/sexual health services is hardly available or very low. The fact that 78.1% (N=704 from 913) of the sex workers had not attended a STI-specialist provides good grounds for access optimisation, including efforts to strengthen health care seeking behaviour among the sex workers in all the involved countries. The problem of access to SRHR-services is another essential discussion point. Given that a third of the survey respondents had already had two or more abortions and less than the half had attended a sexual/ reproductive health specialist in the past year, measures for scaling up of available, accessible, and affordable sexual health service should be put in place for sex worker communities, irrespective of their health insurance status. The lack of health insurance, detected by 60% of the respondents is one of the most distinctive risk indicators as for the access of sex workers to general health care.

In conclusion, although the different European countries share common problems referring to the access of SWs to health care, there is a need to tailor the services in each of the countries to the specific needs of these most-at-risk groups. The IBBS survey findings pointed clear prevention messages:

- Sex work scenes show multiple overlaps with other marginalised vulnerable groups. These overlaps double the vulnerability as they impede uptake of HIV, STIs and SRHR services.
- Predictors for increased risk for HIV/STIs, ie, IDU, alcohol use before/during work, inconsistent condom use by oral and vaginal sex should be addressed with targeted prevention interventions

While formulating these messages BORDERNETwork unequivocally emphasizes the necessity of a Europe-wide recognition of SWs (male as well as female) as an important target group for prevention, research, and policy efforts - efforts that should furthermore be embedded in human rights and decriminalisation approaches. This is in keeping with

the good practice recommendation formulated by WHO [6]: 'All countries should work towards decriminalisation of sex work and elimination of the unjust application of non-criminal laws and regulations against sex workers.[...] Health services should be made available, accessible, and acceptable to sex workers based on the principles of avoidance of stigma, non-discrimination, and the right to health.'

XI. Recommendations

Bridge research to combination prevention

The combination of social determinants of risk, including precarious living circumstances and social stigma, multiplies the vulnerability of SWs and impedes their access to prevention, diagnosis, and treatment of HIV/AIDS/STIs.

The key message for the combination prevention practice is that health policy regulations should endorse the creation of structures for early and easy access to health care services for SWs. An adequate health care provision package (including sexual and reproductive health) should be envisaged, including those SWs lacking health insurance and social insurance and those suffering from the aggravating circumstances of illegal status.

The evidence produced by BORDERNETwork has been brought to the attention of national public health policy actors in the participating countries. Follow-up is needed to integrate the findings into practice.

XII. References

1. ECDC Special Report. Implementing the Dublin Declaration: 2010 Progress Report
2. European Centre for Disease prevention and Control / WHO Regional Office for Europe. HIV/ AIDS surveillance in Europe 2009. Stockholm: European Centre for Disease prevention and Control; 2010.
3. Platt, L., Grenfell, P., Bonell, C., Creighton, S., Wellings, K., Parry, J. et al. (2011). Risk of sexually transmitted infections and violence among indoor-working female sex workers in London: the effect of mi-gration from Eastern Europe. *Sexually Transmitted Infections*, 87 (5), 377–384.
4. van Veen, M. G., Götz, H. M., van Leeuwen, P. A., Prins, M. & van de Laar, M. J. W. (2010). HIV and Sexual Risk Behavior among Commercial Sex Workers in the Netherlands. *Archives of Sexual Behavior*, 39 (3), 714–723.
5. Decker, M. R., Wirtz, A. L., Baral, S. D., Peryshkina, A., Mogilnyi, V., Weber, R. A. et al. (2012). Injection drug use, sexual risk, violence and STI/HIV among Moscow female sex workers. *Sexually Transmitted Infections*, 88 (4), 278–283.
6. World Health Organization (Hrsg.). (2012). Prevention and treatment of HIV and other sexually transmitted infections for sex workers in low- and middle-income countries. Recommendations for a public health approach.
7. European Parliament. (2011). New EU policy framework to fight violence against women. European parliament resolution of 5 April 2011 on priorities and outline of a new EU policy framework to fight violence against women (2010/2209(INI)).
8. UNAIDS guidance note on HIV and sex work. (2008). [Geneva]: UNAIDS.
9. Simic, M., Johnston, L. G., Platt, L., Baros, S., Andjelkovic, V., Novotny, T. et al. (2006). Exploring Barriers to 'Respondent Driven Sampling' in Sex Worker and Drug-Injecting Sex Worker Populations in Eastern Europe. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 83 (7), 6–15.
10. Robert Koch Institut (RKI) (Hrsg.). (2011). Workshop des Robert Koch Institus zum Thema STI-Studien und Präventionsarbeit bei Sexarbeiterinnen. Berlin
11. Platt, L., Rhodes, T., Judd, A., Koshkina, E., Maksimova, S., Latishevskaya, N. et al. (2007). Effects of sex work on the prevalence of syphilis among injection drug users in 3 Russian cities. *American Journal of Public Health*, 97 (3), 478–485.
12. Taylor, A., Hutchinson, S. J., Gilchrist, G., Cameron, S., Carr, S. & Goldberg, D. J. (2008). Prevalence and determinants of hepatitis C virus infection among female drug injecting sex workers in Glasgow. *Harm Reduction Journal*, 5

Annex. List of abbreviations

CEE	Central and Eastern Europe
ECDC	European Centre for Disease Control
EU	European Union
FSWs	Female Sex Workers
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
IBBSS	Integrated bio-behavioural surveillance survey, known also as second generation sentinel surveillance survey
ID	Injecting Drugs
IDUs	Injecting drug users
PLHIV	People Living with HIV
PWID	People Who Inject Drugs
RDS	Respondent-driven sampling
SEE	South Eastern Europe
SRHR	Sexual and Reproductive Health and Rights
STI	Sexually transmitted infection
SWs	Sex workers
UNAIDS	United Nations Programme on AIDS
UNGASS	United Nations General Assembly Special Session
VCCT	Voluntary Confidential Counselling and Testing
VCT	Voluntary Counselling and Testing
WHO	World Health Organisation



BORDER|NET work

CROSSING BORDERS, BUILDING BRIDGES

bordnet.eu / spi-research.eu

Coordinator:



SPI-Forschung gGmbH
Kottbusser Strasse 9, 10999 Berlin

Partners:



AIDS HILFE
AHW (Austria)



HESED (Bulgaria)



NIHD (Estonia)



AISC (Estonia)

ROBERT KOCH INSTITUT



RKI (Germany)



Kompetenzzentrum für sexuelle Bildung
MAT-LAKOST (Germany)



AHP (Germany)



Papardes Zieds (Latvia)



SPWSZ (Poland)



POMOST
POMOST (Poland)



ASOCIATIA ROMANA ANTI-SIDA
ARAS (Romania)



PRIMA (Slovak Republic)