Characteristics, High-Risk Behaviors and Knowledge of STI/HIV/AIDS and STI/HIV Prevalence of Street-Based Female Sex Workers in Tbilisi, Georgia: 2002 - 2004

Report on Two Behavioral Surveillance Surveys with a Biomarker Component for the SHIP Project

- Save the Children: STI/HIV Prevention (SHIP) Project
- Tanadgoma, the Center for Information and Counseling on Reproductive Health
- Infectious Diseases, AIDS and Clinical Immunology Research Center

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Infectious Diseases, AIDS and Clinical Immunology Research Center







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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
AIDS Center	Infectious Diseases, AIDS & Clinical Immunology Research Center
BSS	Behavioral Surveillance Survey
СТ	Chlamydia trachomatis
ELISA	Enzyme Linked Immunosorbent Assay
FSW	Female Sex Worker
GEL	Georgian Lari (exchange rate of 1.82 GEL = 1 USD in October 2004)
HIV	Human Immunodeficiency Virus
IDP	Internally Displaced Person
IDUs	Injecting Drug Users
IgG	Immunoglobulin G
IPM	Institute for Polling & Marketing
MTCT	Mother to Child Transmission
MSM	Men who have Sex with Men
NG	Neisseria gonorrhea
NGO	Non-Governmental Organization
PCR	Polymerase Chain Reaction
RPR	Rapid Plasma Reagent
SC	Save the Children
SHIP	STI/HIV Prevention Project
SPSS	Statistical Package for the Social Sciences
STIs	Sexually Transmitted Infections
TG	Tanadgoma
ТР	Treponema pallidum
TPHA	Treponema pallidum Hemagglutination Assay
VCT	Voluntary Counseling and Testing
WIIO	

WHO World Health Organization

Definitions

Anonymous-linked testing – testing where no names are taken but results are linked to a number that only the participant knows.

- **Consistent Condom Use** Use of condoms every time sexual relations occur, including vaginal, anal, or oral sex.
- **Divorced** A person who has officially terminated the contract of marriage.
- **FSW client** A person with whom the FSW has established sexual relations in exchange for money or goods.
- **High-Risk Behavior** Any behavior that puts an individual or individuals at increased risk of contracting STIs/HIV or transmitting STIs/HIV to another individual (e.g., having multiple sex partners without using condoms consistently; sharing used non-sterile needles among IDUs).
- **Regular sexual partner** A spouse/boyfriend/person with whom the FSW cohabitates and has established regular sexual contacts without exchange of money.

Permanent Client - A client who often uses sexual services of one particular FSW.

- **Separated** A person who does not cohabitate and has a broken relationship with her/his spouse without having officially terminated the legal status of marriage.
- **Street-based female sex workers** women who seek to provide sex in exchange for money by walking or standing on streets.



Figure 1: Map of Georgia; population - 4.4 million.

Executive Summary

This report is the second behavioral surveillance survey (BSS) conducted in Georgia among Street Based Female Sex Workers (FSWs). The first BSS (referred to as BSS-1) was conducted in 2002, and it served as a baseline to measure the prevalence of STIs/HIV as well as different risk behaviors of the subpopulation. The data provided an understanding of behavioral and biological factors contributing to the spread of the infection among FSWs. In addition, it provided a basis for designing and evaluating behavior change interventions implemented within Save the Children's STI/HIV Prevention (SHIP) Project. The second BSS (referred to as BSS-2) was conducted in late 2004 to examine what, if any, changes may have occurred in the prevalence of diseases and risk behaviors.

Time - Location Sampling (TLS) Methodology, a probability sampling method, was used in both BSS-1 and BSS-2. TLS takes advantages of the fact that some hidden populations tend to gather or congregate in certain types of locations. To develop a survey sampling frame, in October 2002 and September 2004 preliminary ethnographic mapping exercises were undertaken to identify the numbers, street sites and working hours of street-based FSWs in Tbilisi. In both BSS-1 and BSS-2 a total of 160 FSWs agreed to participate and were interviewed, including two transvestites interviewed for BSS-1.

The interviews were face-to-face and conducted in the office of Tanadgoma in Tbilisi by experienced interviewers from the Institute of Polling & Marketing (IPM). The FSWs were asked questions regarding high-risk behaviors, knowledge of STIs and HIV/AIDS and use of health services. After the interview, each respondent was asked if she would provide both a urine and blood specimen for an anonymous-linked test for sexually transmitted infections (STIs) and HIV. In BSS-1, of the 158 FSWs interviewed, 155 provided a urine specimen; the prevalence rate of gonorrhea was 17.4% and 25.8% for Chlamydia. Of the 158 FSWs, 153 provided a blood sample. Of these 153 FSWs, the prevalence of syphilis was 28.8%.¹ No FSW was found to be HIV+ in BSS-1. In BSS-2, out of the 160 FSWs interviewed, 158 provided blood and 157 urine specimens for testing. The prevalence of syphilis was 48.7%; 22.3% of FSWs interviewed for BSS-2 had Chlamydia and gonorrhea. Two FSWs (1.3%) were found to be HIV positive in the follow up survey.

Comparatively, FSWs in BSS-1 were slightly younger than the FSWs that participated in BSS-2 (On average, FSWs were 27.1 years of age in BSS-1 and 29.8 years of age in BSS-2); In BSS-2 only 3 (1.9%) FSWs interviewed were younger than 19, while in BSS-1 slightly more than 10.0% of FSWs were of that age group. In BSS-1 more than two-thirds (69.6%) of FSWs were younger than 31 years of age, and the percentage of the same age category of FSWs recruited in BSS-2 was 55.7%.

FSWs reported attending schooling for, on average 10.9 years in BSS-1 and 11.0 years in BSS-2. In both studies most of the FSWs had completed secondary or vocational level education (76.0% in BSS-1 and 88.6% in BSS-2). 13% and 9.5% of FSWs have earned university degrees in the first (baseline) and follow up surveys.

In both surveys most FSWs are divorced or separated (74.1% in BSS-1 and 80% in BSS-2). Very few of them were married (<9% in both surveys). The overwhelming majority (85.4% in BSS-1 and 76.3% in BSS-2) of FSWs have dependents (children, parents, grandparents) that they financially support. Moreover, the percentage of FSWs that financially support

¹ These rates of STIs are comparable to rates found in commercial sex settings where condom use is inconsistent and access to effective STI treatment is limited (see Steen and Dallabetta, (in press), "STI Control Interventions For and With Sex Workers", in <u>Reproductive Health Matters.</u>

dependents increases with age in the both surveys. Very few FSWs from both studies are internally displaced persons (IDPs) from Abkhazia or South Ossetia.

Overall, the average age at which FSWs first exchanged sex for money showed an increase from BSS-1 to BSS-2. In BSS-1 FSWs reported their first commercial sexual contact on average at 24.2 years of age, while the FSWs interviewed in the second survey reported their first exchange of sex for money on average at 28.6 years of age. On average, the FSWs have been involved in commercial sex for 3.1 years in BSS-1 and 3.8 in BSS-2. In BSS-2 more FSWs of the oldest age group (>40 years of age) reported they recently started commercial sex activities (at more than 39 years old). The percentage of FSWs having other sources of income decreased from BSS-1 to BSS-2 (from 9.5% to 5.6%). Of those that did, it was generally from petty trade.

The fees received by the FSWs for commercial sex varied from 10 GEL (or \$6 USD) to 215 GEL (\$118 USD) in BSS-1 and from 1 GEL (0.50 USD) to 180 GEL (\$82 USD) in BSS-2. On average, FSWs reported receiving 34.8 GEL (\$16 USD) per sex encounter in the baseline survey and 40.3 GEL (\$22 USD) in BSS-2. In both studies the youngest age group received, on average, a fee double the average received by the oldest age group. Taking the average number of clients per week (8 in BSS-1 and 11 in BSS-2) and the average amount made per client (35 GEL and 40 GEL), on average FSWs earned 280 GEL per week, or 1,120 GEL per month (approximately \$500 USD) in 2002 and 440 GEL per week, or 1,760 GEL per month (about \$960 USD) in 2004. This exceeds by several times the earnings of average households in Georgia. However, this amount includes what they must pay for protection to a pimp, a policeman or others who may extract fees. Nevertheless, even after these payments, FSWs in the surveys most likely earn more per month than the average household in Georgia (213 GEL² and 231 GEL³) and above the official poverty line (107 GEL per person or 212.5 GEL for a family of four).⁴

Only 1.3% of FSWs in BSS-1 and 1.25% of FSWs in BSS-2 reported that they have never used a condom. More than 94% of them reported use of condom with the last commercial sex client in both surveys, and almost three-quarters (74.3% and 71.5%) of FSWs reported that the use of condom was at their initiative, with about 24% stating it was a mutual decision between them and their client in the both surveys. However, the percentage of FSWs who reported consistent use of a condom with commercial sex client during the last month increased from 71.6% in BSS-1 to 83.8% of FSWs in BSS-2.

When asked if they had experienced physical violence in the last year, 20.9% of FSWs from BSS-1 and 24.4% of FSWs from BSS-2 reported they had. The percentage of FSWs who reported sexual violence during the last 12 months decreased almost by half (37.3% in 2002 and 19.4% in 2004). However, 32.3% of FSWs participating in BSS-2 reported being blackmailed by a client or lover and 19.4% being threatened by police. The largest percentage of them was forced to have sexual intercourse by clients in 2002 (52.4%) and by police in 2004 (27.3%).

Almost all FSWs (99.4%) in 2002 and all FSWs (100%) in 2004 were aware of sexually transmitted infections (STIs). A total of 70.9% of FSWs recruited for BSS-1 and 61.3% recruited for BSS-2 reported having at least one STI symptom over the last 12 months.

² <u>The Status of Households in Georgia -2002</u>. November 2002. Dershem and Sakandelidze, Save the Children, Tbilisi, Georgia.

³ The Status of Households in Georgia -2004. December 2004. Dershem and Khoperia, Save the Children & Institute for Polling and Marketing, Tbilisi, Georgia.

⁴ The Official Poverty Lines are for 3rd Quarter, 2002. <u>Georgia Economic Trends</u>, 2002. No.3. The poverty line for a family of four is provided because, on average, FSWs reported having just less than 4 dependents.

In both studies more than one-half of the FSWs (51.6% in BSS-1 and 59.6% in BSS-2) have been tested for HIV, and the vast majority (97.4% in BSS-1 and 96.7% in BSS-2) received the results. When asked if the HIV test was voluntary or not, 85% in 2002 and 96.7% in 2004 said that it was voluntary. In both surveys the highest percentage of FSWs were tested for HIV within the last year (74.4% in BSS-1 and 43.3% in BSS-2)

Conclusions

The two surveillance surveys were conducted as activities within SC's SHIP Project, funded by USAID. They were conducted in order to establish a rigorous and replicable methodological design that would provide high quality data on FSWs and that can, in turn, be used for advocacy in Georgia by the National AIDS Control Program and others. Furthermore, the surveys were conducted to obtain critical data and information for the following:

- Baseline and follow up information on indicators being promoted by UNAIDS in order to monitor the success of STI/HIV prevention programs;
- To develop a new strategy, or make corrections in existing prevention programs;
- Additional information to supplement other formative assessments to determine those risk behaviors where prevention interventions should be directed.

In addition, many other positive outcomes were observed in these surveillance surveys. The sampling methodology chosen required a mapping exercise of all sites for street-based sex workers in Tbilisi. As part of this mapping exercise, Tanadgoma identified additional sites for outreach activities. Furthermore, the participants were quite receptive to receiving STI screening and treatment offered in return for their participation, indicating that FSWs understand the risk of STIs. The surveys also increased awareness among the FSWs regarding services from NGOs and the Healthy Cabinet, a local clinic where anonymous and free-of-charge services are provided. Another positive outcome was that NGOs and government research institutions forged new working relationships that allow for stronger, more synergistic prevention programming in the future. Finally, the parties involved in these surveys increased their data collection skills.

Comparison of the data received from both surveys does not reveal significant changes. At the same time, some changes should be taken into consideration:

1. Change in the age breakdown of FSWs interviewed during both surveys. In 2002 the largest group was 19-24 years of age, while in 2004 the largest age category was 31-39 years of age (33.8%). In addition, the number of FSWs less than 19 years of age dramatically decreased from 2002 to 2004 (11.4% and 1.9%, respectively). This difference could be explained by several reasons:

- Young FSWs that are more in demand than older ones either do not work in the streets (brothels, saunas or mobile-based services) or start in the streets and very soon move to the better-paid conditions of the sex business.
- In general the flow of newcomers to the street-based sex business has decreased. This is also proven by the regular registration data gathered by Tanadgoma.

2. Significant increase in the prevalence of syphilis (28.8% in 2002; 48.7% in 2004). Risk practices of FSWs, particularly lack of use of condoms with regular partners, have not changed much over the two-year period, which might explain the significant increase in the prevalence of syphilis.

3. Decreased knowledge of STI symptoms. In 2002 8.1% did not know any symptoms in women, compared to 27.5% in 2004. These data could be caused either by the influx of new FSWs or by the tiredness of respondents during the interviewing process.

4. Decreased practice of self-treatment (50.0% in 2002; 31.8% in 2004). This positive tendency could be due to the special focus on self-treatment practices in the information-education-communication materials distributed to FSWs over the last two years.

Individual behavior change interventions

Nearly all FSWs reported that access to condoms was not a problem. Several factors complicate condom use, however, such as resistance by clients or the threatening behavior of clients who refuse to use them. Such threats, reported by FSWs, produce fear, and fear may reduce ability and desire to negotiate condom use. Targeting clients in condom promotion, as part of the transactional sexual encounter is, therefore, essential. Condom use among regular partners and permanent clients is more difficult because of issues of trust and intimacy. These individuals, nevertheless, may be high-risk partners, based on the high STI levels in FSWs. Reaching the permanent clients and regular partners of FSWs remains a challenge. These relationships are of unknown stability and fidelity. Trying to reach these partners and design appropriate interventions is necessary.

Service provision: STI services and voluntary counseling and testing for HIV

There is clear epidemiological and biological evidence that STIs facilitate HIV transmission. As a result, prompt, effective STI treatment has become a key strategy for HIV prevention. There are high STI prevalence rates in the sex workers studied in both surveys. Accessible and quality STI care not only results in immediate health benefits for the FSWs but also has the potential to dramatically reduce HIV transmission that may occur in this population. In addition, good quality STI services could impact the prevalence levels within the general population. Therefore, it is imperative that quality services should be made accessible and available to FSWs.

FSWs report that often they do not trust specialized health providers because of what they consider to be expensive or unnecessary charges.⁵ In addition, they distrust state medical facilities because of the perception that they do not always provide accurate diagnoses. Improving public services and improving the perception of public services will be an important component of an overall strategy to improve STI treatment among FSWs. Formulating and addressing other reproductive health needs of FSWs, such as contraceptive services, is also essential.

Knowing one's HIV serostatus can have a profound impact on behavior. More than one-half of the FSWs in both surveys report having been tested. Continued promotion and availability of voluntary counseling and testing services for HIV should remain a priority. These are probably best provided at locations that include other sexual health services.

Social network interventions

In Tbilisi, in addition to street-based sex work, there is facility-based sex work (saunas, bathhouses and hotels) and cell phone-based sex work. This survey only targeted street-based sex workers.⁶ The networking of the sex workers in Georgia is unknown. Successful prevention interventions with FSWs depend on involving a wide range of people who influence commercial sex activity either directly or indirectly. These include both the sex workers

⁵ "Partnership Defined Quality: quality of STI/HIV services as defined by female sex workers and health care providers in Tbilisi 2003". SHIP Project publication by Save the Children.

⁶ Children under 15 years of age were not included in this study although it is recognized that some streetchildren also are street-based sex workers.

themselves as well as the clients, but in addition the "gatekeeper" individuals who control access to sex workers, such as brothel owners, hotel managers and pimps.

In addition to the NGO outreach workers and health care professionals, another source of information about HIV/AIDS and STIs is peer educators (sex workers themselves involved in providing information to their peers) who represent an effective way to reach others within the target population.

Interventions to reduce the risk environment

Multiple strategies are necessary to address risk in commercial sex settings. These include both individual behavior change interventions, as outlined above, and environmental interventions addressing risk at the structural level.⁷ One important factor is to reduce obstacles to prevention and treatment services– they must be affordable, convenient, user-friendly and confidential. While sex work is neither legal nor illegal in Georgia, the police are involved in apprehending FSWs for compulsory testing. Sex workers may avoid this forced testing by paying bribes, either monetary or by offering sexual favors. Violence is also common in this population. Interventions to address violence – violence prevention and legal rights awareness – should also be considered.

Recommendations

- 1. FSWs in this study have high awareness on HIV/AIDS, high condom use rates with paying clients, low use with regular partners, high levels of treatable STIs, low levels of knowledge on STI symptoms, and health seeking behavior at ineffective STI services (pharmacies). Prevention interventions must address all potential risk behaviors.
- 2. Behavior change communication interventions should be targeted at FSWs and their clients, because the responsibility for condom use should not rest solely on the FSW. Involving FSWs in the development of relevant messages and the dissemination of these messages within their networks will increase effectiveness. Strategies to address clients will need to be developed, perhaps through targeting the transactional sex setting.
- 3. Health services with a specialization for dealing with sex workers and clients should be upgraded and promoted. In addition to providing diagnosis and treatment for STIs, these services should provide prevention counseling, HIV counseling and testing, and other sexual health services that are needed by FSWs. Fees associated with these services should be put in the context of the public health benefit. These services could be expanded to include regular partners of sex workers as a way to access this group.
- 4. Since television was cited as the main source of HIV/AIDS information by FSWs, television information campaigns should address educational issues appropriate for the general population. Specific, explicit HIV prevention messages and materials for FSWs, their clients and regular partners are best provided at the interpersonal level through outreach workers and peer educators rather than through mass media outlets. The interventions should target the gaps in knowledge and attitudes revealed through the surveys. New, additional strategies and methodologies should be elaborated in order to fill these gaps.
- 5. Efforts should be made to expand prevention services to other sex worker groups, such as facility-based sex workers and cell phone-based sex workers. This may involve working with "gatekeepers" for access. In addition, especially hard to reach populations, such as male transvestites and street children who may be engaged in transactional sex, should be addressed. This will necessarily include involving groups that work with street children for identification and referral to appropriate services, as well as efforts to prevent children from engaging in such activities.

⁷ Steen Richard and Gina Dallabetta, "STI Control With Sex Workers and Presumptive Treatment Augment Efforts to Reduce Risk and Vulnerability", *Reproductive Health Matters*, 2003, Nov; 11(22): 74-90.

- 6. Voluntary HIV testing, with adequate pre- and post-test counseling, should continue. Testing can assist in risk reduction counseling. Current HIV testing procedures in Georgia require a considerable waiting time between the drawing of blood and the return of the test results. Pilot testing of rapid testing procedures for validity and client acceptability might increase the number of individuals getting HIV testing. VCT services should be made available through sites that provide other HIV prevention and health services to FSWs.
- 7. Interventions for FSWs must be extended beyond Tbilisi and Batumi. Based on information from the Public Health Officials in Kutaisi, for example, commercial sex is common there. High-risk sites should be identified and prevention interventions begin. Typical sites include urban areas, ports and commercial transit areas, cross-border areas, and military sites where large numbers of workers without their families reside.
- 8. In a survey among youth 84% of males 15-17 years of age thought it was "okay" to start their sexual life before marriage with an FSW.⁸ Moreover, 74% reported that they had had sexual intercourse. In light of these findings, organizations working with youth should promote healthy lifestyle curricula in which youth, especially males, are sensitized to healthy sexual choices and the risks of having unprotected sex with a sex worker. Longer-term strategies should address norm changes around male and female sexuality, as well as drug and alcohol use in Georgia.
- 9. Non-coercive, anonymous, ethical and systematic surveillance of FSWs (and other high risk groups), both behavioral and of selected biological markers, should be conducted throughout Georgia and repeated on a regular basis to provide early warning of a possible dramatic increase in the prevalence rate. In addition, surveys can provide invaluable information for designing focused interventions as well as for monitoring whether STI/HIV prevention and reduction interventions are working.
- 10. Prevention interventions should be addressed to the general population. This is one additional way to reach FSWs clients and increase their awareness.

⁸ Youth Reproductive Health Survey, UNFPA, 2002, Tbilisi, Georgia.

	Prev	Prevalence				
	2002 BSS-1	2004 BSS-2				
Indicator	Females	Females				
	(n=160)	(n=160)				
Participated in 2002 BSS-1	N/A	28.8% (46/160)				
Biomarker						
Neisseria gonorrhea	17.4% (27/155)	22.3% (35/157)				
Chlamydia Trachomatis	25.8% (40/155)	22.3% (35/157)				
Reactive Syphilis serology (RPR, TPHA with ELISA	28.8% (44/153)	48.7% (77/158)				
confirmation)						
Percentage with no STI	44.7% (68/152)	31.3%(50/160)				
Percentage with 1 STI	40.1% (61/152)	41.3%(66/160)				
Percentage with 2 or more STIs	15.2% (23/152)	27.5%(44/160)				
HIV (ELISA with Western Blot confirmation)	0.0% (0/153)	1.3% (2/158)				
Demographic Characteristics						
Median age	26 yrs	30 yrs				
Level of education	76.0% (Secondary)	88.6% (Secondary)				
Marital status	74.1 %(Divorced)	80.0% (Divorced)				
Sole source of income	90.5% (143/158)	94.4%(151/160)				
Have financial dependents	85.4% (135/158)	85.6% (137/160)				
Average # of dependents for ESWs with dependents	3.0 (135)	2 2 (127)				
Alcohol and Drug Use	3.9 (133)	5.5 (157)				
Consume algobal at least ongo a week	12 40/2 (67 /158)	22.8% (54/160)				
Ever Talcon "coille"	42.470(077136) 1.00/ (3./158)	1 39/2 (2/160)				
Ever use of "inhelents"	1.9% (3/158) 1.0% (3/158)	1.570(2/100) 0.6% (1/160)				
Ever injected drugs	1.9% (3/158) 1.3% (2/158)	5.6% (9/160)				
Study Population Characteristics	1.370 (2/130)	3.070 (37100)				
Median age at 1 st sexual contact	16.0 yrs	17.0 yrs				
Median age at 1 sectual contact Median age 1 st received money in exchange for sex	23.0 yrs	25.0 yrs				
Mean years working as sex worker	3.0 yrs.	3.9 vrs				
	(range vrs: <1 to 26)	(range yrs: <1 to 19)				
Sexual Risk Behavior						
Has non-paying/regular partner	57.6% (91/158)	51.3% (82/160)				
Condom use during last sexual intercourse with non-	17.6% (16/91)	14.6% (12/82)				
paying/regular partner						
Consistent (always) condom use with non-paying/regular	6.8% (5/73)	7.6% (6/79)				
partner over last month						
Condom use with last client	94.9% (156/158)	94.4% (151/160)				
Consistent (always) condom use with clients over last month	71.6% (111/155)	84.8% (134/158)				
Condom use with last paying partner		92.3% (36/39)				
Consistent condom use with paving partner over the last 12		83.1% (108/130)				
months		05.170 (100/150)				
Experienced threats or physical violence in the past year	42.4% (67/158)	29.4% (47/160)				
Savual contact against will in the past year	15.8% (25/158)	5.0% (8/160)				
Sexual contact against will in the past year	13.870 (23/138)	3.078 (87 100)				
Both sexual contact against will and threats or physical	17.7% (28/158)	14.4%(23/160)				
violence in the past year						
Condoms						
Place where condoms are obtained	87.0% (pharmacy)	89.3% (pharmacy)				
Less than 5 minutes is needed to obtain a condom	/5.0%	80.3%				
It condom not used with last client, why?	50% (client refused)	⊃/.1% (client refused)				

Table 1: Summary of Indicators for FSWs in Tbilisi For BSS-1 and BSS-2.

	Prevalence				
	2002 BSS-1	2004 BSS-2			
Indicator	Females	Females			
	(n=160)	(n=160)			
STI/HIV Knowledge, Experience and Practices					
Do not know any STI symptom in women	8.1% (12/149)	27.5%(44/160)			
Had abnormal vaginal discharge in last 12 months	70.3% (109/155)	54.4%(87/160)			
Had vaginal ulcer/boil in last 12 months	11.0% (17/154)	6.9%(11/160)			
Places sought treatment:					
State clinic/hospital	56.8% (62/111)	45.5%(40/88)			
Self-treatment	50.0% (56/111)	31.8% (28/88)			
Aware of HIV/AIDS	98.1% (155/158)	94.4% (151/160)			
Know person with HIV/AIDS	8.4% (13/154)	15.9% (24/151)			
Received information about HIV/AIDS	93.0% (147/158)	94.4%(151/160)			
Main sources of HIV/AIDS information:	× , , , , , , , , , , , , , , , , , , ,				
Television	41.5% (61/147)	54.4%(87/151)			
Social Worker	36.7% (53/147)	32.5%(49/151)			
Correctly identify six means of transmitting HIV	0.6% (1/155)	1.3% (2/151)			
Voluntary Counseling and Testing					
Voluntary HIV testing in the community	80.6% (125/155)	83.4%(126/151)			
Had an voluntary HIV test	51.6%(80/155)	59.6%(90/151)			
Received HIV test result	97.4%(76/78)	96.7%(87/90)			

Introduction

According to the 2002 Census, Georgia's population is 4.4 million people in a geographical area of 70,000-sq. km., bounded by the Black Sea, Russia, Azerbaijan, Armenia and Turkey. Much of the social structure supporting health care has become increasingly dysfunctional since the collapse of the former communist system and the economy, paralleling the rise in overall risk to the health of the Georgian population. Transparent borders, allowing drugs to move freely throughout the region, and liberalization of sexual taboos traditional to Georgians, has resulted in increased levels of high-risk behaviors involving female sex workers (FSWs) and injecting drug users (IDUs). This has resulted in an accelerating spread of sexually transmitted infections (STIs), including HIV. The incidence of HIV has grown slowly and is presently concentrated within the IDU population. The wide availability of drugs, combined with the complex factors motivating demand, and the almost total absence of educational interventions to reduce demand, is likely to mean that IDU trends will continue in an upward direction for the foreseeable future. Also, the exponential growth in STIs, particularly among young people, is alarming in that STI is a co-factor in HIV transmission, and the same risk behaviors perpetuate both infections. STIs also have severe reproductive consequences, in addition to increasing HIV transmission.

WHO experts indicate that Georgia is on the verge of an HIV/AIDS outbreak if adequate preventive measures are not taken. At present, Georgia falls within the category of countries classified as low HIV prevalence, defined by UNAIDS as having less than 5% infection in all groups, with the highest concentration among high-risk groups that includes IDUs and FSWs. The first HIV diagnosis in Georgia was made in 1989. As of the July 1 of 2005, a total of 740 HIV cases were registered; 619 are males and 121 are females, ranging from 21 to 40 years of age.⁹

The trend since 1996 has seen an increase in the number of HIV cases (see Figure 3). However, STI/HIV data suffer from a weak surveillance system, which is likely to have resulted in widespread under-reporting. Moreover, the anecdotal reports of recent increases in the rates of STIs indicate a future potential for HIV to spread more rapidly among a wider population through sexual contact.



Figure 3: Number of New HIV Cases from 1996 to 2004.

The actual number of persons living with HIV in Georgia may be closer to 3,000 persons.¹⁰ IDUs account for 67% of the registered HIV cases in Georgia; heterosexual contacts for 26.7% (1/3 of these heterosexual contacts were with known IDUs); homo/bi-sexual contacts for

⁹ Infectious Diseases, AIDS and Clinical Immunology Research Center, Annual Report, 2004. Unpublished.

¹⁰ USAID: Country Health Statistical Report, Georgia, September 2004, <u>http://www.usaid.gov/our_work/</u>global_health/home/Countries/eande/georgia.pdf.

3.3%; 0.8% were blood recipients; 0.9% was from vertical transmission; and 1.3% was from unknown causes. 11

Unfortunately, very limited epidemiological data is available on STI/HIV prevalence and on the high-risk behaviors of FSWs in Georgia. In a report published in 2001, a cohort study conducted between 1997-1999 in Tbilisi (the capital), Poti and Batumi (port cities on the Black Sea) detected 1.4% prevalence of HIV among the 73 FSWs investigated.¹² In another report, 51.5% of FSWs indicated they used condoms with clients on a regular basis.¹³ As reported in the first Behavioral Surveillance Survey (BSS-1) the overwhelming majority (94.9%) of FSWs recruited reported consistent use of condoms with clients. None of FSWs tested in 2002 was positive on HIV. However, 28.8% of FSWs had syphilis, 25.3% Chlamydia and 17.4% gonorrhea. In BSS-2 the prevalence of syphilis increased to 48.7%; the prevalence of Chlamydia and gonorrhea remained stable among tested women (22.3% for both infections).

During the Soviet period, FSWs were forced to have mandatory testing and treatment on STI/HIV, and there was very strict epidemiological surveillance and control on these infections in the country. After the collapse of the communist system in 1991, Georgia started building democratic institutions. This has meant the development of totally new approaches to HIV/STI prevention and control. However, while sex work is neither legal nor illegal in Georgia, the police are involved in apprehending FSWs for compulsory testing. Sex workers may avoid this forced testing by paying bribes or with sexual favors to the police. This harassment by law enforcement officers produces more barriers for FSWs to voluntarily seek treatment, and it makes it more difficult for organizations providing services to this population.

Governmental and non-governmental organizations in Georgia, as well as the international donor community, have responded to the early HIV epidemic with pilot interventions. Despite the political support for such interventions, an effective, comprehensive system to prevent the further spread of STIs/HIV is yet to be established in Georgia, as well as the Caucasus region as a whole.

Even though Georgia is considered a low prevalence country for HIV/AIDS, there is a great danger in equating low prevalence with low priority for HIV prevention.¹⁴ The economic conditions in Georgia have not improved over the last several years. With the rapid decline in the socio-economic situation and increased social inequality, there has been an increase in stress, depression and hopelessness among individuals. This environment provides for the conditions for greater HIV transmission due to increased high-risk behaviors, such as drug use and prostitution.

Ethical Issues

The survey investigators were cognizant of the fact that the individuals participating in this study were at some risk for social harm should they be identified as part of the target group. These surveys were designed to provide maximum protection for the participants, yet at the same time provide individual and community benefits.

The ethical issues that have been taken into consideration are:

• Participation in these surveys was voluntary. Participants were free to withdraw at any time and were informed that refusal or withdrawal would not affect services they would normally receive.

¹¹ Infectious Diseases, AIDS and Clinical Immunology Research Center, Annual Report, 2004. Unpublished.

 ¹² Situation Analysis on HIV/AIDS in Georgia, Georgia AIDS & Clinical Immunology Research Center, 2001
 ¹³ Georgian AIDS & Immunology Research Center, 2001: pg.42 (unpublished)

¹⁴ Mills, S. "Back to behavior: prevention priorities in countries with low prevalence." <u>AIDS</u> 2000; 14 (supplement 3): S267-73.

- No names were recorded. All documentation is anonymous, linked only by a study number.
- Staff conducting the survey was trained in discussing sensitive issues and protecting participants' confidentiality and human rights.
- All individuals identified with a curable sexually transmitted infection were offered counseling and referred to the "Healthy Cabinet" for treatment.
- Recruitment of participants was done initially by NGO "Tanadgoma (TG)," who already works with the population, or by the target population themselves.

BSS-2 was approved by the Ethical Committee of the HIV/AIDS Patients Support Foundation.

Methodology

Two Behavioral Surveillance Surveys (BSS) were conducted among FSWs in Tbilisi. The first BSS (hereafter referred to as BSS-1) was conduced in October-November 2002 to establish baseline prevalence data. The second BSS (hereafter referred to as BSS-2) was conducted in September-October 2004 as a follow-up. Both surveys were conducted in cooperation with the Infectious Diseases, AIDS and Clinical Immunology Research Center (AIDS Center), which has been designated by the government as the primary HIV/AIDS research and treatment institution in Georgia.

Over the past two to three decades several methods for recruiting hidden populations for surveillance and other survey research purposes have been developed. Time Location Sampling (TLS), qualified as a probability sampling method, is strongly recommended for surveillance surveys among hidden population. This approach, which is being used more frequently in recent years, takes advantage of the fact that some hidden populations tend to gather or congregate in certain types of locations. In TLS, through preliminary ethnographic mapping exercises, potential survey sites are observed during a pre-defined time interval. Because the locations where members of particular subgroups congregate change over time, it was necessary to repeat sampling frame development exercise before each round of surveillance data collection. The mapping exercise was conducted in Tbilisi in October 2002 and repeated in August-September 2004 by TG, in collaboration with a local research institute, the Institute for Polling & Marketing (IPM).

Mapping

The mapping exercise, designed to identify the street sites, approximate numbers, and working hours of FSWs in Tbilisi, was conducted for both surveys. The exercise involved the use of a detailed street map of Tbilisi. TG, in consultation with IPM, divided the city into 30 grid sections for BSS-1 and into 28 sections BSS-2 (Figure 4). The size of a section was determined by the number of streets that could be easily observed within a short period of time.

For each section an observation route map was made. In unmarked cars, six teams comprised of two observers – a social worker from TG and a researcher from IPM — toured each section twice: once during the daytime (14:00 to 17:00) and once at night (21:00 to 00:00). In 14 sections in 2002 and in 17 sections in 2004 no street-based FSWs were sighted. In the remaining sections (16 sections in BSS-1 and 17 sections in BSS-2) 174 FSWs were identified in 75 locations in BSS-1 and 229 FSWs in 35 locations in BSS-2. Of the 75 locations in 2002, 23 were identified as "day" sites with 53 FSWs; 48 were identified as "night" sites with 123 FSWs. In four sites FSWs were seen working both during the day and night. In 2004 the number of the "day" sites was 17 with 100 FSWs; the number of "night" sites 14 with 129 FSWs. As in 2002, in four sites FSWs were seen both during the day and night. Based upon this mapping exercise, a decision was made to recruit 160 FSWs to participate in the both surveys.

Recruitment consisted of a driver and a TG social worker going to each section and informing the FSWs about the purpose of the BSS surveys. In BSS-1 each FSW was offered a coupon allowing her to receive free testing and treatment, if she were found to have an STI, as an incentive for her participation. In BSS-2 FSWs were offered a set of beauty products by NIVEA as an incentive.¹⁵

If the FSW agreed, she was brought by car to TG's office for the interview, and immediately following the interview asked to provide a blood and urine sample. Screening was conducted for syphilis, Chlamydia infection, gonorrhea, and HIV. Each FSW was given a card with their ID number and a referral coupon to the Healthy Cabinet clinic in Tbilisi for free-of-charge STI services (including prophylaxis). All FSWs were asked to call after two weeks to find out the results of their test. After the interview, the FSWs were driven back to the site where they were recruited.



Figure 4: Sections of Tbilisi Used for Observation and Mapping of FSWs.

There are several categories of FSWs in Tbilisi: a) street-based; b) sauna (or bathhouse) based; c) hotel based; and d) "mobile phone" based. Generally, each category of FSW is found in different locations and serves different types of clients. Thus, each category represents a type or "status" among FSWs. For both BSS-1 and BSS-2 surveys street-based FSWs were selected since they are:

- Easier to locate;
- Less educated and less likely to be aware of the dangers associated with high-risk behaviors;
- Easier to access because there are no pimps;

¹⁵ FSWs chose the incentives during Focus Group Discussions and In-Depth Interviews conducted before both surveys began.

- Likely to be at higher risk of STIs/HIV, due to having a greater number of clients; and
- Least likely to be able to afford testing and treatment.

In BSS-2 in Tbilisi, in addition to street-based FSWs, 25 sauna-based FSWs were recruited in order to achieve a predetermined sample size of the survey target population.

The AIDS Center provided TG with a list containing the tests results by ID number. When an FSW telephoned to find out the results, she gave her ID number and she was told the result, if it was negative. If the result was positive, the FSW was invited to TG, and the results were presented along with post-counseling. In BSS-1, they were encouraged to use their coupon at the Healthy Cabinet for free-of-charge treatment. From the 160 FSWs interviewed, 108 received notification of their STI/HIV status in 2002; 66 FSWs called or came for the testing results in 2004. The one male sex worker who initially tested positive for HIV received his results in TG's office in 2002, and two FSWs received the HIV positive results in 2004. After post-counseling, they were referred to the AIDS Center for further diagnostics and treatment.

Study Instrument

The survey instrument used in BSS-1 and BSS-2 was a behavior study questionnaire for FSWs provided in the manual, *Behavioral Surveillance Surveys: Guidelines for Repeated Behavioral Surveys in Populations at Risk for HIV* by Family Health International (FHI). This tool has been used for the study of risky sexual and related behavior among FSWs in several countries. The questionnaire was translated into Georgian and back into English. It was adopted after reviewing, pre-testing and adjusting to the Georgian context.

The questionnaire was pre-tested in a focus group and during in-depth interviews with FSWs. A final version of the questionnaire was also translated into Georgian, and a Russian version was prepared for those FSWs who were Russian-speaking. Only slight modifications (also based on pre-testing with the FSWs) were made to the questionnaire for BSS-2.

Recruitment of Study Participants and Interviewing

A team of two staff from TG recruited study participants in all locations, either during the day or night, identified through the mapping exercise, beginning with the most distant locations.

- 1. The staff of TG (4 social workers) contacted 184 street-based FSWs in 2002 and 257 FSWs in 2004.
- 2. A total of 158 street-based FSWs and two male transvestites were recruited for BSS-1 and 160 FSWs for BSS-2, including 135 street-based FSWs and 25 FSWs from saunas (see Table 1 in the Appendix).
- 3. Subject duplication was overcome by using a subject identification database that recorded the FSW's age, ethnicity, and physical characteristics, such as height, weight, scars, tattoos, and some biometric measures.
- 4. In both surveys the sampling ended when the target sample size of 160 FSWs was achieved.
- 5. After completing the interview, FSWs were asked to give blood and urine specimens for STI and HIV testing. Two physicians working at TG drew the blood specimens in BSS-1, and a professional nurse working in the mobile laboratory of TG drew the blood in BSS-2.

- 6. In BSS-1 a total of 155 urine samples were collected for testing on NG and CT, and 153 blood samples were collected for testing on syphilis and HIV. In BSS-2 three FSWs didn't provide urine samples and two of them refused to provide blood for testing.
- 7. 46 (28.8%) FSWs recruited for BSS-2 participated in BSS-1.

The interviews were conducted by four trained and experienced interviewers from IPM in two private rooms in TG's office. In addition, independent consultants were hired to observe the interviewing process. On average, the interview took 35 minutes to complete in BSS-1 and 25 minutes in BSS-2.

The report will focus on the FSWs only and will not include the two male transvestites recruited in BSS-1.

Biomarker Testing

The biomarker component of the two studies involved the analysis of blood and urine specimens at the Laboratories of Serology and Virology of the AIDS Center in Tbilisi.

HIV testing

HIV antibody testing was performed using a three-level enzyme-linked immunosorbent assay (ELISA) testing strategy. If a sample was reactive in the first ELISA test (Genescreen Plus HIV Ag-AB, Bio-rad), the sample was retested two more times using another kit of ELISA. Samples were considered HIV antibody positive if they were reactive in at least two out of three tests. Any sample non-reactive to the first test was considered as HIV-antibody negative. HIV-antibody positive samples were tested with Western Blot (HIV blot, Genelabs) as the confirmatory test.

Syphilis testing

Serum samples were tested also for syphilis antibodies with rapid plasma regain (RPR, Human) test and T*reponema pallidum* hemagglutination assay (TPHA, Human). ELISA (ELISA TP IgG test [Nubenco]) tests were used for confirmation of syphilis-antibody positive samples.

Neisseria gonorrhea and Chlamydia trachomatis

Urine specimens were tested by Polymerase Chain Reaction (PCR) according to manufacturer's instructions for the detection of *Neisseria gonorrhea* and *Chlamydia trachomatis* (CT/NG PCR, Roche). PCR-positive cases were considered as confirmed infections of NG and CT, respectively.

Data Entry and Statistical Analysis

Save the Children (SC) contracted the Institute for Polling and Marketing (IPM), located in Tbilisi, Georgia, to develop the BSS-1 and BSS-2 FSWs databases using Statistical Package for the Social Sciences software (SPSS, version 11). After completing the interviewing, IPM created a database by matching the questionnaire that included variable names, variable descriptions and value labels. Two experienced individuals made the data entry; one who read the completed interview form and the other entering the data.

Once the SPSS databases were completed, a random check was made of 5% of the completed interview forms. In addition, a frequency was run on all variables to examine values, labels and frequencies. The "cleaned" database was submitted to SC for data analysis.

Katie Stvilia from the AIDS Center analyzed the data. Percentages, means and medians were calculated to assess prevalence of high-risk behavior among FSWs. Bivariate relationships between age groups were examined using Chi-square test and Fischer's exact test.

Findings

Portrait of a Female Sex Worker - Nestan

In Tbilisi, FSWs are of various ages, social backgrounds, and places of work. They have different types of clients, payment scales, and negotiation skills for condom use. However, despite this variety, it is important when possible to put a "face" on all the data and statistics presented. Thus, the FSW portrait of Nestan presented below is meant to illustrate a typical FSW in Tbilisi in 2004.

Nestan is 30 years of age and has been a sex worker for almost four years. Not long after graduating from high school she married her boyfriend thinking she would have somewhat of a normal life in her town outside Tbilisi. But several years later, her husband divorced her. She suddenly found that she had to support children as well as her mother, who helps take care of the children. Altogether she is supporting almost 6 people. Due to severe economic problems there were few jobs in her town, and since she only had a high school degree (her parents and relatives did not encourage her to seek a higher education) she knew her prospects for a decent paying job were remote. Consequently, to help support her family, Nestan moved to Tbilisi and started selling the one asset she had: her body.

Nestan has been selling sex for almost four years. During the last week she has had eleven clients. She charges 40 GEL, which means over the last week she has made about 440 GEL. Compared to most people in Tbilisi, this is good money—at least her children will be able to eat, get school supplies, and she will be able to buy the medicine her mother needs. (She conceals from her family and friends back in her town how she actually earns money.)

To protect herself, most of the time she requires her clients to wear a condom. She always carries at least 2 condoms with her that she bought from the pharmacy. The few times when her clients do not wear a condom it is because they refused, and some threatened to beat her. Nestan and other sex workers she knows are occasionally beaten by clients and pimps. Why? They are not always sure— just because they are sex workers or just because the men have had a bad day and want to vent their anger on someone.

Nestan battles sexually transmitted infections; over the past year, she has suffered from abnormal vaginal discharges and burning during urination. Recently, she went to a clinic because of an infection but left without treatment because she was uncertain of their diagnosis. She was told she had several infections, some without symptoms. She wondered how she could be infected without having a symptom. She remembers her friends telling her that some clinics tell you that you have an infection when you don't, just to make extra money. With these doubts, Nestan preferred not to be treated at the clinic. However, just to be safe and to save herself some money, she gave herself an injection of antibiotics.

Nestan has heard of HIV/AIDS from watching television and from speaking with a few social workers in Tbilisi. She knows the importance of using condoms to help prevent her from getting sexually transmitted infections. Because of her concern, she has been tested for HIV, and she was extremely happy when she was told the result was negative.

Nestan has a boyfriend whom she loves, and he does not mind her doing this type of work, since she must support her family. To show her love and trust to him, she does not insist on him using a condom. However, she is never sure that he does not have other sexual partners. Sometimes she wonders if her infections are coming from him.

On weekends, she will often drink with her friends, but she stays away from drugs and pills. Everyday she sees the economic situation slowly changing in Georgia, and she tries to keep herself healthy, so that when the opportunity arrives she can get a job that pays enough to support her family outside of Tbilisi, and she can move back to her hometown.

Socio-demographic characteristics

In BSS-1 and BSS-2 virtually all (99% and 100%) sex workers interviewed were female. Only two transvestites were identified in 2002 (but the report is focused on FSWs only).

On average, FSWs recruited in BSS-1 were 27.1 years of age (a median of 26.0 years of age); FSWs recruited in BSS-2 were slightly older on average, 29.8 years of age (a median of 30.0 years of age) as shown in Table 4. The largest percentage (32.3%) of FSWs recruited in 2002 was 19-24 years of age, with the next largest percentages (25.9%) 25-30 years of age and (23.4%) 31-39 years of age. Slightly more than 10% (or 18) of the interviewees were younger than 19 years of age. The smallest percentage of FSWs was 40 years of age or older (6.9%).

In BSS-2, FSWs 31-39 years of age represent 33.8% of the study population, with the next largest percentage (32.5%) 25-30 years of age. 21.3% of FSWs recruited for BSS-2 were 19-24 years of age. Those 40+ years old represented 10.6% (or 17) of FSWs and only 3 (1.9%) of them were younger than 19 years of age (Figure 5).



In a representative survey of 589 households conducted in Tbilisi in February 2002, of the 1,725 individuals living in these households 700 were females between 16 and 52 years of age — similar to the FSWs in the surveys. Figure 5 shows that FSWs recruited for BSS-1 tend to be disproportionately under 25 years of age compared to females in the general population, especially in the age group of 19-24 years. The FSWs recruited for BSS-2 are closer to the general pattern of female age distribution at younger ages (<24 years of age).

In 2002 and 2004, the majority of FSWs were Georgian (79.7% in BSS-1 and 77.8% in BSS-2), with only small percentages being Russian (6.3% in BSS-1 and 4.4% in BSS-2), Armenian (2.5% in BSS-1 and 3.2% in BSS-2), Ossetian (1.9% in BSS-1 and 3.2% in BSS-2) or "other".

In Georgia there are approximately 250,000 internally displaced persons (IDPs) from Abkhazia and South Ossetia. In Tbilisi, there are an estimated 18,000 female IDPs between 16 and 64 years of age, or about 3.6% of all females in Tbilisi between these ages. In 2002, 3.8% of FSWs reported that they were an IDP. In 2004 the percentage of FSWs who were IDPs increased up to 5%, but still there does not appear to be a disproportionate percentage of female IDPs who are FSWs.

FSWs recruited for BSS-1, on average, lived in Tbilisi for 13 years; for BSS-2 there was a slight increase with FSWs stating an average of 14.7 years in Tbilisi. A small percentage (9.5% in BSS-

1 and 7.1% in BSS-2) of FSWs has been previously engaged in commercial sex in another city, mostly in Turkey.

FSWs who participated in BSS-1 attended schooling for, on average, 10.9 years. FSWs interviewed for BSS-2 attended schooling for, on average, 11 years. In both surveys the majority of FSWs completed secondary or vocational level education (76.0% in BSS-1 and 88.6% in BSS-2), with 13.0% in 2002 and 9.5% in 2004 having earned a university degree (Figure 6). Only 1 FSW (0.6%) from BSS-1 and two (1.3%) from BSS-2 had no formal education.

FSWs are comparatively less educated than females of similar age in the general population. The largest difference is that a greater percentage of FSWs have only a secondary education or vocational training than females in the general population (76% and 88.6% vs. 39.9%, respectively), whereas a greater percentage of females in the general population have a university degree than FSWs (48.3% vs. 13.0% and 9.5%, respectively).



Figure 6: FSWs by Level of Education by BSS and General Population in Tbilisi.

The majority (74.1% in BSS-1 and 80% in BSS-2) of FSWs is divorced or separated (Table 4). 17.7% FSWs recruited in 2002 and 11.3% of FSWs recruited in 2004 have never been married, and only 8.2 and 8.8% were married at the time the surveys were conducted.

In the both surveys the majority of the FSWs (57.6% in BSS-1 and 66.3% in BSS-2) reported consuming alcohol less than once a week or never, with 12.7% and 10% of FSWs recruited in 2002 and 2004 respectively reporting daily alcohol consumption. Figure 7 shows daily consumption of alcohol by age groups (from Table 6 in the Appendix). Daily consumption of alcohol was more common among younger FSWs (<30 years of age).





In BSS-1 only 2 FSWs (1.3%), between the ages of 25-30, had injected drugs. An equal percentage (1.9%) of FSWs across age groups reported using inhalants or pills. In BSS-2 nine FSWs (or 5.6%) reported injecting drugs (heroin, opium and *subutex*). The largest percentage (57.6%) of FSWs who reported drug use in BSS-2 smoke marijuana.

The age when FSWs first had sex occurred, on average, at 16.5 and 17.6 years of age for BSS-1 and BSS-2, respectively (presented in Table 7 in the Appendix). According to both surveys the average age of first sexual contact increases with age, which suggests that the age of first sexual contact is decreasing. Overall, the average age at which FSWs first exchanged sex for money was at 24.2 years of age in BSS-1. FSWs recruited for BSS-2 started at an older age (the average at 28.6 years of age). By age groups, the average age at which sex was exchanged for money was not much different in the two surveys (Figure 8.). In 2002 and 2004 the average age at which sex was first exchanged for money was 16.8 and 15.7 years old, respectively, for the youngest age group, increasing up to 39.1 and 39.0 years of age for the oldest age group. This was statistically significant for BSS-1 (F=2.77, 4df, p<0.05).



Figure 8: Mean Ages of FSWs at Their First Commercial Sex by BSS.

In BSS-1 FSWs had been involved, on average, in commercial sex for 3.1 years; this increased slightly to 3.8 years in BSS-2. This indicates that they have been engaged in sex work for a relatively short period of time. For example, the oldest age group has been involved in commercial sex for 4.6 years in BSS-1 and 5.4 years in BSS-2. The longest (26 yrs.) involvement was reported by one FSW who participated in BSS-1.

If in 2002 9.5% of FSWs reported having other sources of income; in 2004 the percentage decreased to 5.6%. When they did, it was generally from parental support or petty trade. In BSS-1 involvement in another income earning activity was more common among FSWs 19-24 years and 31-39 years of age (11.8% and 16.2%, respectively), while in BSS-2 none of FSWs younger than 25 had any additional income.

In BSS-1 the overwhelming majority (85.4%) of FSWs reported having dependents (children, parents, grandparents) that they financially support. In BSS-2 the percentage remained virtually unchanged (85.6%). In both surveys the percentage of FSWs who financially support dependents increased with age, which was statistically significant ($\chi^2 = 12.21$ (4df), p < 0.05 in the BSS-1 and $\chi^2 = 22.042$ (8df), p < .005 in the BSS-2).

In BSS-1, FSWs who financially supported one or more dependents supported, on average, 4 dependents; in the second survey the average was 3. In 2002 slightly more than one-half (51.5%) of the FSWs who reported having dependents were either divorced or separated, and also reported that sex work is their only source of income. In 2004 the percentage of FSWs who reported having dependents and being divorced or separated was much higher (94.5%). It seems that due to fewer employment opportunities and recent increases in divorce rates, economic survival is one of the major driving forces for women to be involved in commercial sex in Tbilisi.

High-Risk Behaviors, Knowledge of STI and HIV/AIDS

Sexual Behavior with Clients

The overwhelming majority (> 90% in both surveys) of FSWs reported having clients during the last 7 days (shown in Table 8 in the Appendix). In 2002 FSWs who reported having clients in the last 7 days had, on average, 8.3 clients over this period of time; in 2004 FSWs reported on average 9.9 clients over the 7-day period. In both surveys older FSWs reported having more clients during the week prior to the interview than younger ones.

In BSS-1 FSWs reported receiving fees for commercial sex ranging from 10 GEL (or \$5 USD) to 215 GEL (\$98 USD), with an average of 35 GEL (\$16 USD). In BSS-2 the range of the fees varied from 1 GEL (0.50 USD) to 180 GEL (\$99 USD), with an average of 40 GEL (\$22). The youngest group received, on average, almost double the amount received by the oldest group in the both surveys.

The overwhelming majority (94.9% in 2002 and 94.4% in 2004) used a condom with their last client in the both surveys.¹⁶ This percentage was similar for all age groups. In both surveys condom use resulted from the insistence of the FSW in about three-forth of cases; in 23.8% - 24.3% of cases it was based on the mutual decision of both the FSW and client. About 5% of FSWs reported they did not use a condom with their last client or partner in both surveys because the partner refused or the client "looked healthy."

When asked about frequency of using condom over the last 30 days, 71.6% of FSWs from BSS-1 reported regular use of condoms with clients. In 2004 the percentage of FSWs who reported regular use of condoms with clients increased to 84.8%. Increased frequency of regular use of condoms was reported by FSWs of all age groups, except the youngest who in 2004 reported only 33.3% consistent use of condoms over the last month (see Figure 9).



Figure 9: Consistent Use of Condoms with Clients Over the Last Month by Age Groups.

There is some concern that this high percentage of reported consistent condom use with clients may reflect "social desirability bias," that is the FSWs report they use condoms because they know that they are supposed to use them. If high condom use rates are indeed correct (as corroborated by the prevalence of condom use by injecting drug users with sex workers), the

¹⁶ In BSS-1 survey of 302 Injecting Drug Users (2002, Save the Children), 139 reported having sex with a commercial sex partner. Of these, 83.5% (or 116/139) reported using a condom at their last sex. In BSS-2 survey of 300 IDUs (2004, Save the Children), 42 reported having sex with a commercial sex partner. Of these, 81.0% (or 34/42) reported using a condom.

high prevalence of STIs in this group suggests that regular or non-paying clients are a major risk factor for STIs and/or FSWs have limited access to effective STI services¹⁷.

Sexual Behavior with Permanent Clients (in BSS-2)

In 2004 the majority of FSWs (78.0%) reported not having permanent clients (Table 8 in the Appendix). The majority of FSWs who reported having a permanent client (62.9%) had up to 5 sexual encounters with that client during the last month.

Virtually all (92.3%) FSWs reported use of condom with permanent clients during the last sexual contact. In two-thirds of cases it was at the FSW's insistence. In 33.3% of cases condom use was decided together by the FSW and permanent client. Only 3 (7.7%) FSWs didn't use a condom with permanent client during the last encounter because the partner looked healthy or he refused to use a condom.

When asked about frequency of using condoms with permanent clients over the last 12 months, 88.6% of FSWs reported always using a condom with permanent clients during this period. FSWs of the youngest and oldest age groups reported the lowest percentages of regular use of condoms with permanent clients over the last 12 months (87.5% and 75% respectively), shown in Figure 10.



Figure 10: Consistent use of Condoms during the last sexual contact with Permanent Client.

Sexual Behavior with Regular Sexual Partners

More than half (57.6% in BSS-1 and 52.2% in BSS-2) of the FSWs recruited in both surveys have a regular sexual partner (see Table 10). In 2002 the oldest FSWs were the least likely to have a regular partner (27.3%); in 2004 the percentage was lowest for the youngest age group (33.3%). In BSS-1 those FSWs 19-24 years of age had the largest percentage (72.5%) who reported having a regular partner; the difference by age groups was statistically significant (χ^2 = 10.46 (4df), p<0.05). In BSS-2 the largest percentage (58%) who reported having a regular partner was reported by those 19 to 30 years of age.

Of the FSWs who had a regular partner, only 17.6% in 2002 used a condom during the last sexual contact. In 2004 slightly less (14.6%) FSWs reported condom use. In 2002 when asked who offered to use the condom, the majority (56.3%) did not know, with 25% reporting it was their initiative, 12.5% saying it was a mutual decision, and 6.3% saying it was their partner's decision. In BSS-2 many more FSWs reported successful negotiation with regular partners regarding condom use (58.3%), or partners requested using them (47.7%).

¹⁷ A similar conclusion was reached in a study of STIs among women in the general population in two regions of Georgia. A Prevalence Study of STIs and Anemia Among Sexually Active Reproductive Age Women in Two Regions of Georgia, Curatio International Foundation, Tbilisi, July 2002 (pg 3).

When asked why a condom was not used, in 2002 72.6% of FSWs reported that they did not think it was necessary or their partner refused (12.3%). In 2004 the majority (78.6%) of those FSWs who didn't use a condom during the last sexual contact with a regular partner stated that they trusted him. In 31.4% of the cases the partner refused to use a condom. The second largest percentage (24.3%) said they did not use a condom because they didn't think they needed it with their regular partner. Also, 18.6% of FSWs didn't use a condom because they did not think of it.

The main reason for not using a condom with clients was refusal by the client in both surveys (50.0% in BSS-1 and 57.1% in BSS-2). The percentage of FSWs who didn't think they needed to use a condom with clients decreased from 37.5% in 2002 to 14.3% in 2004. Interestingly, 16.1% more FSWs in 2004 reported the reason for not using a condom with a client was because of not having one.



Figure 11: Reasons for Not Using a Condom at Last Sex with Regular Partner and Client.
Regular Partner

Behavior of FSWs regarding condom use with regular partners did not change much from 2002 to 2004. In 2002 over the previous 12 months only 6.8% of FSWs always used a condom with a regular partner, compared to 7.6% in 2004. A condom was always used only if the FSW had had an abortion a short time before or was menstruating. Only one FSW didn't trust her regular partner and reported always using a condom.

Condom Accessibility

In both surveys FSWs were asked to identify places where they usually buy or get condoms free-of-charge (presented in Table 11 in the Appendix). The largest percentage (87.0% in BSS-1

and 89.3% in BSS-2) stated that they buy condoms at a pharmacy. Interestingly, of those FSWs who did not use a condom during their last sex encounter, none mentioned the reason was because "condoms are too expensive."

In 2002 three-fifths (60.9%) of FSWs reported receiving free-of-charge condoms from Tanadgoma, while in 2004 the percentage decreased to 35.2%. In 2002, 81.8% of the FSWs in the oldest age group obtained free-of-charge condoms from Tanadgoma while only 29.4% of the FSWs in the youngest age received them. The difference across the age groups seeking free-of-charge condoms was found to be statistically significant ($\chi 2= 9.988$ (4df), p<.04 [10%<5]). In 2004, getting free-of-charge condoms from Tanadgoma became more common for middle-aged FSWs (44.2% of 25-30 years old and 45.3% of 31-39 years old).

In 2002 a small percentage (14.1%) of FSWs obtained condoms from co-workers. This practice was more common among the oldest (45.5%) and the youngest (23.5%) FSWs, which was statistically significant ($\chi 2$ = 13.071 (4df), p<.01 [20%<5]). In addition, 12.8% obtained condoms from bars and hotels. In 2004, these two sources were practically not used by FSWs for obtaining condoms. Almost one of every ten (9.4%) FSWs reported getting condoms at saunas (Figure 12).



In both surveys the majority (74.2% and 75%) of FSWs needed five minutes or less to buy/get a condom if they needed one.

These findings show that availability and economic and physical access are not major reasons for not using condoms, either with clients or partners. When condoms are not used it is due to the refusal of clients or partners (50%) and ignorance about STI/HIV (since they judge by appearance whether their clients or partners are "healthy/not infected").

Violence Affecting FSWs

In BSS-1 when asked if FSWs had experienced either sexual or physical violence in the last year, 42.4% (or 67) of them reported they had. (See Table 12 in the Appendix.) Of the 67 FSWs who reported experiencing violence, 41.8% had experienced both types of violence, with 37.3% experiencing only sexual violence and 20.9% experiencing only physical violence. Of the 42 FSWS willing to identify the perpetrator, 52.4% reported their client committed the violence. The next highest percentage (26.2%) identified the police.

In 2004, 29.4% (or 47) of FSWs reported experiencing sexual or physical violence; 39 FSWs were willing to identify the perpetrator. Slightly more than one-half (51.3%) of the 39 FSWs reported that a client committed violence. The next highest percentage (15.4%) identified the police.

Almost 2 of every 10 FSWs (19.4%) in BSS-2 reported being victims of sexual violence through blackmailing or threats. Approximately one-third (32.3%) of FSWs in BSS-2 reported being blackmailed by client and 19.4% threatened by the police. Those reporting the highest percentage of sexual violence were younger FSWs (19-24 years of age). In these cases clients and policemen were also identified as the main perpetrators.

A small percentage (7.1%) of FSWs interviewed in 2002 reported being beaten or raped by a regular sexual partner. In addition, 9.5% experienced beatings or rape from strangers and 11.9% from "other "people. In 2004, 11 FSWs (6.9%) reported being raped. The largest percentage (27.3%) of these rapes was committed by policemen; 18.2% of FSWs reported being raped by either a client or stranger.



Figure 13: Sexual and/or Physical Violence Experienced By FSWs by BSS.

Knowledge of STIs and Health Seeking Behavior

Almost all (99.4%) FSWs in 2002 and all (100%) FSWs in 2004 were aware of STIs, as shown in Table 14 in the Appendix. When asked to identify specific STI symptoms for women, 8.1% of FSWs could not, and twice as many (19.4%) could not identify STI symptoms for men in 2002. The youngest age group of FSWs recruited for BSS-1 was the least informed on STIs; in this age group, 23.5% could not identify any symptoms for women and 38.5% could not identify any symptoms for men.

In 2004 FSWs were less knowledgeable about STI symptoms than FSWs recruited in 2002. In 2004 when asked to identify specific STI symptoms for women, 27.5% of FSWs could not identify one symptom and 48.1% could not identify one symptom for men. The youngest FSWs were the least informed about STIs; in this group 33.3% of FSWs could not identify any STI symptom among women and twice more (66.7%) did not know any symptom for men.

In BSS-1 some of the most common STI symptoms for women, such as vaginal ulcer and lower abdomen pain, were identified by only 17.4% and 15.4% percent of FSWs, respectively. In BSS-2 vaginal ulcer and lower abdomen pain were identified by only 5% and 16.3% of FSWs, respectively.

In 2002 a total of 112 FSWs (70.3%) had the STI symptom of abnormal vaginal discharge during the last 12 months; this decreased to 54.4% in 2004. Of the FSWs with an STI symptom in 2002, 90.2% received some treatment for these infections, while 9.8% (or 11) did not. In 2004 all (100%) FSWs with identified STI symptoms received some kind of treatment. In BSS-1 the majority (56.8%) of FSWs sought treatment at a state-run clinic or hospital, with almost as many using some form of self-treatment (50.0%). Of these FSWs, two-fifths identified a pharmacy as the source of care. In BSS-2 a lower percentage (45.5%) of FSWs received treatment at a state clinic/hospital. Fewer FSWs (31.8% and 36.4%) recruited in 2004 applied self-treatment or received treatment/advice at pharmacies.

Self-treatment most likely occurs when FSWs are referred to a pharmacy for medication, or when they obtain medication for an on-going infection, or they have a social contact (e.g. friend, neighbor) that works in the pharmacy and provides medication.

When asked about their sexual behavior during the period they were infected, two-thirds (67.3%) of FSWs reported using condoms, 57.7% stopped having intercourse, and 50.5% told their sex partner about the STI. In 2004 the percentages of infected FSWs using condoms, stopping intercourse or telling their partner declined (57%, 36% and 25%, respectively).

Knowledge of HIV/AIDS and HIV Testing

Virtually all (98.1% and 94.4%) FSWs interviewed for BSS-1 and BSS-2 had heard of the HIV virus and AIDS (Table 15). In 2002 the age group with the lowest percentage being aware of HIV/AIDS was those FSWs 25-30 years of age, while in 2004 the age group with the lowest percentage being aware of HIV/AIDS was the youngest FSWs (66.7%). In 2004, the percentage of FSWs knowing someone infected with HIV almost doubled from 2002 (8.4% to 15.9%, respectively).

Despite high awareness rate of HIV, the ability of FSWs to correctly answer specific questions on HIV/AIDS was moderate to low in both surveys (Figure 14). FSWs were well aware of the risk of infection through needle-syringe sharing (91.0% in 2002; 89.4% in 2004). Slightly more FSWs (66.2%) recruited for BSS-2 than for BSS-1 (63.9%) knew that correct condom use is the best protection against HIV infection. In both surveys the questions most frequently answered incorrectly were whether HIV could be spread through meal sharing, followed by mosquito bites. Overall, however, only one FSW (0.6%) in 2002 and two (1.3%) in 2004 correctly answered all six questions on HIV/AIDS.



A high percentage of FSWs (91.6% in BSS-1 and 91.4% in BSS-2) know about the risk of mother to child transmission (MTCT), with little difference by age group. However, when

asked about which actions can be taken to reduce MTCT, 35.5% in 2002 and 42.0% in 2004 did not know.

When asked various STI/HIV prevention methods, 9.6% of FSWs recruited in 2002 and 7.9% in 2004 did not know any prevention methods. However, when FSWs did identify prevention methods, the majority (81.5% in BSS-1 and 86.8% in BSS-2) mentioned the consistent use of a condom. In BSS-1 this percentage increased with age, reaching 100% for those FSWs 40 years of age or more.

A small percentage of FSWs is aware of other preventative methods, such as avoiding sexual contact (8.9% in 2002 and 1.3% in 2004), restricting sexual contact to one reliable, uninfected partner (2.5% and 2.6%), and practicing safe sex (6.4% and 1.3%) through the correct use of condoms.

Four out of every five FSWs recruited for BSS-1 and BSS-2 stated that it is possible to take a confidential HIV/AIDS test in their community. In 2002 knowing about an HIV testing site in the community was highest among older FSWs, while in 2004 both the oldest FSWs and the youngest group demonstrated knowledge about HIV testing sites.

About one-half (51.6%) of FSWs recruited in 2002 reported being tested for HIV, and the majority (97.4%) had received the results. In 2004, slightly more (59.6%) FSWs reported being tested, and the majority (96.7%) received results. When asked if the HIV test was voluntary or not, 85% of FSWs recruited for BSS-1 and 96.7% of FSWs recruited for BSS-2 said that it was voluntary. The majority of FSWs (85.9% in 2002; 83.3% in 2004) were tested for HIV within the last two years.

In BSS-2 FSWs were asked about their attitude on sharing their HIV test results with other people. The majority of FSWs who had an HIV test stated that they had informed their friends (59.6%) or family members (19.2%) about the HIV testing results. A small percentage of them shared the test result with their permanent client (5.8%), a regular client (7.7%), and their regular partner (15.4%).

When FSWs were asked if they were to receive an HIV positive result, with whom would they share the result, 23.2% of FSWs would tell no one; almost one-third (31.1%) would inform only their regular partner. Almost equal percentages of FSWs would share the information with a family member, friend or co-worker (28.7%, 27.9% and 26.2%, respectively). Only 7.4% of FSWs would inform clients (see Table 16 in the Appendix).

Sources of Information about HIV/AIDS

Nearly all FSWs (93.0% in 2002 and 94.4% in 2004) received some information on HIV/AIDS (see Table 17 in the Appendix). In BSS-1 the percentage of those who received information increased with age, from a low of 77.8% for FSWs less than 19 years of age to a high of 100% for FSWs 40 or more years of age. In BSS-2 the highest percentage (97.1%) of FSWs receiving information was reported by those 19-24 years of age and the lowest (66.7%) by the youngest age group.

FSWs recruited for BSS-1 reported that the major source of information about HIV/AIDS came from television (41.5%), followed by social workers (36.7%), and friends and relatives (34.0%), as shown in Figure 15. A small percentage of FSWs (10.2%) received information on HIV/AIDS from clients. In BSS-2, FSWs reported that they receive the information on HIV/AIDS from TV and/or radio (54.4%). The role of social workers, friends and relatives in providing the information decreased from 2002 to 2004. In BSS-2, 32.5% of FSWs reported receiving information on HIV/AIDS from social workers and 23.2% from friends and relatives. TV and radio are the major sources of information for all age groups, with its role increasing

among older FSWs - 33.3% for the youngest group up to 75% for those over 40 years of age. None of the FSWs recruited for BSS-2 was informed by a client.



In both surveys FSWs were also asked about how frequently they listen to the radio or watch TV. In 2002 two-fifths (40.5%) of FSWs listened to the radio and slightly more than one-half (51.6%) watch TV daily. The youngest FSWs were more likely to listen to the radio and watch TV than older FSWs. In 2004 considerably more FSWs (70.6%) reported watching TV every

Attitude of FSWs towards Persons with HIV/AIDS

day.

HIV/AIDS is a stigmatized topic, as shown in the responses of FSWs recruited for both surveys to a series of questions (see Table 17 in the Appendix).

Almost one-half of the FSWs recruited for BSS-1 would be willing to take care of a female or male relative with HIV infection (47.7% and 47.1%, respectively), decreasing to 36.4% willing to do so in 2004. Almost equal percentages (45.8%) would keep it a secret, if a family member had HIV in 2002. This remained almost unchanged in 2004 (48.3%).



Figure 16: Attitudes of FSWs toward Persons with HIV/AIDS.

Smaller percentages of FSWs: believe an infected student has a right to continue his/her studies (22.6% in 2002; 23.8% in 2004); believe a teacher has a right to continue teaching (20.6% in 2002; 15.9% in 2004); would like to share a meal with an infected person (12.3% in 2002; 10.6% in 2004); or would buy food from an HIV positive salesperson (9.0% in 2002; 8.6% in 2004).

Results of HIV and STI testing

Four (4) of the FSWs recruited in 2002 and three FSWs recruited in 2004 tested positive for HIV antibodies using the ELISA method; only two FSWs recruited in 2004 were confirmed with the HIV Western Blot test (see Table 18 in the Appendix).

The most frequently detected STI was syphilis in both surveys (i.e., reactive syphilis serology). In 2002, 44 (or 28.8% of 153 specimens) reactive on RPR and TPHA were confirmed with the ELISA test. In 2004, the percentage of ELISA reactive syphilis cases increased to 48.7%.

In 2002, one-quarter of the samples (25.8%, or 40 of 155) were reactive on the Chlamydia PCR test. In 2004, an equal percentage of FSWs (22.3%, or 35 of 157) were reactive on the Chlamydia and Gonorrhea PCR test. The highest percentages of infection were detected among FSWs in the 19-24 age group (50% in 2002; 41.2% in 2004).

Almost one out of every five of the FSWs in BSS-2 (17.4%, or 27 of 155) tested positive for gonorrhea. The difference of PCR reactivity according to age groups for Chlamydia and Gonorrhea was found to be statistically significant in BSS-2 ($\chi^2_{= 26.943}$ (8df), p<.001 and $\chi^2_{= 23.698}$ (4df), p<.00).

The rate of STIs found was quite high in both surveys, especially in BSS-2, considering that a large percentage of FSWs reported consistent (100%) use of condoms with their clients. Further analysis showed that, of those FSWs who reported consistent (always) use of condoms with (regular and permanent) clients in 2002, 15.2% of had gonorrhea, 27.7% had Chlamydia, and 27.7% had syphilis. In 2004, FSWs were asked about both regular and permanent clients separately. Of those FSWs who reported consistent use of condoms with *regular clients* 20.5% had gonorrhea, 20.2% had Chlamydia, and 49.2% had syphilis; and of those FSWs who reported consistent use of condoms with *permanent clients* 17.8% of had gonorrhea, 19.4% had Chlamydia, and 50.0% had syphilis.



Figure 17: Rates of Syphilis, Chlamydia and Gonorrhea in BSS-1 and BSS-2.

The high percentage of FSWs reporting consistent use of condoms with clients may reflect their embarrassment about not using condoms consistently (social desirability bias), or FSWs who were infected acquired it from their regular partner. In 2002, for those FSWs having a regular partner, 22.2% had gonorrhea, 42.5% had Chlamydia, and 34.1% had reactive syphilis serology. In 2004, 22.0% of such FSWs had gonorrhea, 24.4% had Chlamydia, and 39.0% had reactive syphilis serology. Thus, even though they reported consistent use of condoms with clients, few consistently used condoms with their regular partner.

Conclusions

The BSS-1 and BSS-2 surveillance surveys were conducted as activities within SC's SHIP Project, funded by USAID. They were conducted in order to establish a rigorous and replicable methodological design that would provide high quality data on FSWs that can, in turn, be used for advocacy in Georgia by the National AIDS Control Program and others.

The surveys provide critical data and information for the following:

- Baseline and follow up information on indicators being promoted by UNAIDS in order to monitor the success of STI/HIV prevention programs;
- To develop a new strategy, or make corrections in existing prevention programs;
- Additional information to supplement other formative assessments to determine those risk behaviors where prevention interventions should be directed.

In addition, many other positive outcomes were obtained. The sampling methodology chosen required a mapping exercise of all sites for street-based sex workers in Tbilisi. As part of this mapping exercise, Tanadgoma identified additional sites for outreach activities. Furthermore, the participants were quite receptive to receiving STI screening and treatment offered in return for their participation, indicating that FSWs likely understand the risk of STIs. The surveys also increased awareness among FSWs regarding services from NGOs and the Healthy Cabinet clinic.

Another positive outcome was that NGOs and government research institutions forged new working relationships that allow for stronger, more synergistic prevention programming in the future. Finally, the parties involved in these surveys increased their data collection skills.

Comparison of the data received from both surveys does not reveal significant changes in the overall picture. Some of the changes that should be taken into consideration are as follows:

1. Change in the age breakdown of FSWs interviewed during both surveys.

In 2002 the largest group was 19-24 years of age, while in 2004 the largest age groups was 31-39 years of age. In addition, the number of FSWs less than 19 years of age dramatically decreased from 2002 to 2004 (11.4% and 1.9%, respectively). This difference could be explained by several reasons:

- Younger FSWs who are in greater demand than older ones either do not start working on the streets and directly work in closed settings or mobile-based service, or start on the streets and very soon move to the better-paid levels of the sex business.
- In general the flow of newcomers to the street-based sex business has decreased. This is also proven by the registration data gathered by Tanadgoma.

2. Significant increase in the prevalence of syphilis (28.8% in 2002; 48.7% in 2004).

Risk practices of FSWs, particularly lack of use of condoms with regular partners, have not changed much over the two-year period, which might explain the significant increase in the prevalence of syphilis.

3. Decreased knowledge of STI symptoms.

In 2002, 8.1% of FSWs could not identify one STI symptom in women. This increased to 27.5% in 2004. These data could be caused either by newcomer FSWs or by the tiredness of respondents during the interviewing process.

4. Decreased practice of self-treatment (50.0% in 2002; 15.9% in 2004).

This positive tendency could be due to the special focus on the dangers of self-treatment that was made in the IEC materials designed by the SHIP Project for FSWs.

Individual behavior change interventions

Nearly all FSWs reported that access to condoms was not a problem. Several factors complicate condom use, however, such as resistance by clients or threatening behavior of clients who refuse to use them. Such threats, reported by FSWs, produce fear, and fear may reduce ability and desire to negotiate condom use. Targeting clients in condom promotion, as part of the transactional sexual encounter is, therefore, essential. Condom use among regular partners and permanent clients is more difficult because of issues of trust and intimacy. These individuals, nevertheless, may be high-risk partners, based on the high STI levels in FSWs. Reaching permanent clients and regular partners of FSWs remains a challenge. These relationships are of unknown stability and fidelity. Trying to reach these partners and design appropriate interventions is necessary.

Service provision: STI services and voluntary counseling and testing for HIV

There is clear epidemiological and biological evidence that STIs facilitate HIV transmission. As a result, prompt, effective STI treatment has become a key strategy for HIV prevention. There are high STI prevalence rates in the sex workers studied in both surveys. Accessible and quality STI care not only results in immediate health benefits for the FSWs, but also has the potential to dramatically reduce HIV transmission that may occur in this population. In addition, good quality STI services could impact the prevalence levels within the general population. Therefore, it is imperative that quality services should be made accessible and available to FSWs. In Georgia, FSWs report that often they do not trust specialized health providers because of what they consider to be expensive or unnecessary charges.¹⁸ In addition, they distrust state medical facilities because of the perception that they do not always provide accurate diagnoses. Improving public services and improving the perception of public services will be an important component of an overall strategy to improve STI treatment among FSWs. Formulating and addressing other reproductive health needs of FSWs, such as contraceptive services, is also essential.

Knowing one's HIV serostatus can have a profound impact on behavior. More than one-half of the FSWs in both surveys report having been tested. Continued promotion and availability of voluntary counseling and testing services for HIV should remain a priority. These are probably best provided at locations that include other sexual health services.

Social network interventions

In addition to street-based sex work, there is facility-based sex work (saunas, bath-houses, hotels and bars) and cell phone-based sex work. This surveillance mainly surveyed street-based sex workers.¹⁹ The networking mechanisms of sex workers in Georgia are unknown. Successful prevention interventions with FSWs depend on involving a wide range of people who influence commercial sex activity either directly or indirectly. These include both the sex workers themselves as well as the clients, but in addition the "gatekeeper" individuals who control access to the sex workers, such as brothel owners, hotel managers and pimps.

¹⁸ "Partnership Defined Quality: quality of STI/HIV services as defined by female sex workers and health care providers in Tbilisi 2003". SHIP Project publication by Save the Children.

¹⁹ Children under 15 years of age were not included in this study although it is recognized that some street-children also are street-based sex workers.

In addition to the NGO outreach workers and health care professionals, another source of information about HIV/AIDS and STIs is peer educators (sex workers themselves involved in providing information to their peers) who represent an effective strategy for reaching the target population.

Interventions to reduce the risk environment

Multiple strategies are necessary to address sexual risk in commercial sex settings. These include both individual behavior change interventions, as outlined above, and environmental interventions addressing risk at the structural level.²⁰ One important environmental intervention is to reduce obstacles to prevention and treatment services – they must be affordable, convenient, user-friendly and confidential. While sex work is neither legal nor illegal in Georgia, the police are involved in apprehending FSWs for compulsory testing. Sex workers may avoid this forced testing by paying bribes, either monetary or by offering sexual favors. Violence is also common in this population. Interventions to address violence – violence prevention and legal rights awareness – should also be considered.

Recommendations

- 1. FSWs in this study appear to have high awareness on HIV/AIDS, high condom use rates with paying clients, low use with regular partners, high levels of treatable STIs, low levels of knowledge on STI symptoms, and health seeking behavior at ineffective STI services (pharmacies). Prevention interventions must address all potential risk behaviors.
- 2. Behavior change communication interventions should be targeted at FSWs and their clients, because the responsibility for condom use should not rest solely on FSWs. Involving FSWs in the development of relevant messages and the dissemination of these messages within their networks will increase effectiveness. Strategies to address clients will need to be developed, perhaps through targeting the transactional sex setting.
- 3. Health services that are accessible for sex workers should be upgraded and promoted within the community. In addition to providing diagnosis and treatment for STIs, these services should provide prevention counseling, HIV counseling and testing, and other sexual health services that are needed by FSWs. Fees associated with these services should be put in the context of the public health benefit. These services could be expanded to include regular partners of sex workers as a way to access this group.
- 4. Since television was cited as the main source of HIV/AIDS information by FSWs, television information campaigns should address educational issues appropriate for the general population. Specific, explicit HIV prevention messages and materials for FSWs, their clients and regular partners are best provided at the interpersonal level through outreach workers and peer educators, rather than through mass media outlets. The interventions should target the gaps in knowledge and attitudes revealed through the surveys. New, additional strategies and methodologies should be elaborated in order to fill these gaps.
- 5. Efforts should be made to expand prevention services to other sex worker groups, such as facility-based sex workers and cell phone-based sex workers. This may involve working with "gatekeepers" for access. In addition, especially hard to reach populations, such as male transvestites and street children who may be engaged in transactional sex, should be addressed. This will necessarily include involving groups that work with street children for

²⁰ Steen Richard and Gina Dallabetta, "STI Control With Sex Workers and Presumptive Treatment Augment Efforts to Reduce Risk and Vulnerability," *Reproductive Health Matters*, 2003, Nov; 11(22): 74-90.

identification and referral to appropriate services, and efforts to prevent children from engaging in such activities.

- 6. Voluntary HIV testing, with adequate pre- and post-test counseling, should continue. Testing can assist in risk reduction counseling. Current HIV testing procedures in Georgia require a considerable waiting time between the drawing of blood and the return of the test results. Pilot testing of rapid testing procedures for validity and client acceptability might increase the number of individuals getting HIV testing. VCT services should be made available through sites that provide other HIV prevention and sexual health services to FSWs.
- 7. Interventions for FSWs must be extended beyond Tbilisi and Batumi. Based on information from Public Health Officials in Kutaisi, for example, commercial sex is common there. High-risk sites should be identified and prevention interventions begin. Typical sites include urban areas, ports and commercial transit areas, cross-border areas, and military sites where large numbers of workers without their families reside.
- 8. In a survey among youth, 84% of males 15-17 years of age thought it was "okay" to start their sexual life before marriage with an FSW.²¹ Moreover, 74% reported that they had had sexual intercourse. In light of these findings, organizations working with youth should promote healthy lifestyle curricula in which youth, especially males, are sensitized to healthy sexual choices and the risks of having unprotected sex with a sex worker. Longer-term strategies should address norm changes around male and female sexuality, as well as drug and alcohol use in Georgia.
- 9. Non-coercive, anonymous, ethical and systematic surveillance of FSWs (and other high risk groups), both behavioral and of selected biological markers, should be conducted throughout Georgia and repeated on a regular basis to monitor whether STI/HIV prevention and reduction interventions are working.
- 10. Prevention interventions should be addressed to general population. This is one additional way to reach FSWs clients and increase their awareness.

²¹ Youth Reproductive Health Survey, UNFPA, 2002, Tbilisi, Georgia.

Appendix of Data Tables

U	<u> </u>	
Surveys	2002	2004
Location	Tbilisi	Tbilisi
Gender	Female	Female
Date of interviews	4 - 28 November	6 September – 1 October
Location of interview (n)		
At organizations office	100% (158)	84.4% (135)
At Saunas		15.6%(25)
Recruitment (n)		
Recruitment of FSWs in sections of Tbilisi identified through mapping	100% (158)	84.4% (135)
Participation rate		
Total contacted	184	257
Total refused		61
Total agreed	158	160
Total completed	158	160

Table 2: Area Coverage of the Tbilisi, Georgia Behavioral Surveillance Survey.

Table 3: Reasons Reported by FSWs for Refusal to Participate in Survey.

Reason for refusals	BSS-1	BSS-2
	Number of refusals (N=26)	Number of refusals (N=61)
Not interested	65.4% (17)	4.9% (3)
Had a medical check-up and is currently healthy	23.1% (6)	11.5% (7)
Is receiving treatment for some STI	7.7% (2)	
Afraid of needle/syringe to give blood	3.9% (1)	1.6%(1)
Was tested recently		24.6% (15)
Was busy		24.6% (15)
Has own doctor		16.4% (10)
Waiting for the client		6.6% (4)
Was in a hurry		6.6%(4)
Didn't want to go alone with recruiters		1.6%(1)
She was drunk		1.6% (1)

Characteristics	BSS-1	BSS-2
	2002	2004
Age	(158)	(160)
Mean Age (years)	27.1	29.8
Median Age (years)	26.0	30.0
Age Groups	(158)	(160)
<19yrs	11.4%(18)	1.9%(3)
19 – 24 yrs	32.3% (51)	21.3% (34)
25 - 30 yrs	25.9% (41)	32.5% (52)
31 - 39 yrs	23.4% (37)	33.8% (54)
40 + yrs	6.9%(11)	10.6%(17)
Ethnicity (%)	(158)	(158)
Georgian	79.7% (126)	77.8 %(123)
Russian	6.3% (10)	4.4%(7)
Ukrainian	2.5% (4)	1.9% (3)
Armenian	2.5% (4)	3.2% (5)
Ossetian	1.9% (3)	3.2%(5)
Iew	1.9% (3)	1.3%(2)
Ezid	1.3% (2)	1.3%(2)
Kabardoan	1.3% (2)	
Kurd	1.3% (2)	1.9%(3)
Greek	0.6% (1)	0.6%(1)
Mari	0.6% (1)	
Azeri		4.4%(7)
Level of Education (%)	(154)	(158)*
None	0.6% (1)	1.3% (2)
Primary	10.4% (16)	0.6% (1)
Secondary/vocational	76.0% (117)	88.6 %(140)
Incomplete higher		
Higher	13.0% (20)	9.5% (15)
Mean yrs of education	10.9	11.06
Internally Displaced Person	3.8% (6)	5.0% (8)
Yes		
Place of Birth	(156)	(158)
Tbilisi	35.9% (56)	32.3%(51)
Another city in Georgia	56.3% (89)	63.3%(100)
Other country	7.1% (11)	4.4% (7)
Russia	5.1% (8)	1.3%(2)
Ukraine	1.3% (2)	3.2%(5)
Israel	0.6% (1)	
Present living place (%)	100%(158)	100%(158)
Tbilisi	mean=13.0	mean=14.7
(yrs lived there)	median=9.0	median=12
Commercial sex activity in another city (%)	9.5%(15)	7.1%(11)
Commercial sex activity in another city (%) * Level of education in the BSS-2 $\chi^2 = 63.922$ (16df), p<	9.5%(15)	7

Table 4: Demographic Characteristics of FSWs.

Table 5: I	Living Arran	gements by	Marital	Status o	of FSWs.

	Never	Married	Married		Divorced/	separated
	2002		2002	04	20	2004
	17.7% (28)	11.3%(18)	8.2% (13)	8.8%(14)	74.1% (117)	80%(128)
Mean Age	20.8	24.3	30.4	33.1	28.3	29.9
Age at marriage (yrs)						
Mean			15.5	16.1	16.8	17.2
Median			15.0	16.5	16.0	17.0
With Whom Do You Live Now?						
- Married, living with husband			30.8%(4)	42.8%(6)		
- Married, living with partner			30.8%(4)	28.6%(4)	40.2%(47)	
- Married not living with husband/partner			23.1%(3)	28.6%(4)		
- Married, has both husband and partner			15.4%(2)			
- Not married, living with partner	46.4% (13)	38.9%(7)				39,8%(51)
- Not married, living alone	50.0% (14)	61.1%(11)			58.1%(68)	60.2%(77)
- Other						
- Refused to answer	0.6%(1)				1.7%(2)	
Do you have financial dependents	(27)	(18)	(10)	(14)	(117)	(128)
Yes	64.0%(18)	61.1%(11)	100%(10)	71.4%(10)	88.1%(104)	78.9%(101)
No	32.1%(9)	38.9%(7)		28.6%(4)	11.9%(14)	27.1%(27)
Does your spouse have other partner/lover	(7)		(10)	(14)	(36)	(58)
- Yes				21.4%(3)	8.3% (3)	6.9%(4)
- No	85.7% (6)		90.0% (9)	42.8%(6)	88.9% (32)	46.6%(27)
- Don't know	14.3% (1)		10.0% (1)	7.1%(1)	2.8% (1)	8.6%(5)
- Refused to answer				28.6%(4)		37.9%(22)
Have you ever been married $\chi 2= 36.438$ (4df), p<.000	0 (20%<5)					

			Age Groups									
		otal	<19 19-24					31-39		40 +		
Drug & Alcohol Use (n)	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
	(n=	n=	<u>(n=</u>	<u>(n</u>	(n	<u>(n</u>	<u>(n</u>	(n=	(n=	(n	(n	
Consumption of alcohol												
Every day	12.7%(20)	10%(16)	16.7%(3)		11.8%(6)	17.6%(6)	19.4%(7)	18.5%(10)	5.4%(2)	3.8%(2)	9.1%(1)	5.9%(1)
Once a week	29.7%(47)	23.8%(38)	38.9%(7)	100%(3)	35.3%(18)	23.5%(8)	11.1%(4)	25.4%(11)	40.5%(15)	17.3%(9)	18.1%(2)	23.5%(4)
Less than once a week or never	57.6%(91)	66.3%(106)	44.4%(8)		52.9%(27)	58.8%(20)	69.4%(25)	61.1%(33)	54.1%(1)	78.9%(41)	72.7%(8)	64.7%(11)
Ever took pills	1.9%(3)	1.3%(2)	5.6%(1)		3.9%(2)	2.9%(1)	5.6%(2)		2.7%(1)		9.1%(1)	5.9%(1)
Ever used inhalants	1.9%(3)	0.6%(1)			3.9%(2)				2.7%(1)			5.9%(1)
Ever injected drugs	1.3%(2)	5.6%(9)				2.9%(1)	5.6%(2)	5.8%(3)		5.6%(3)		11.8%(2)
	1		1				1					

Table 6: Drug and Alcohol Use by FSWs.

Table 7: Aspects of Sex Work for FSWs.

							Age (Groups				
	T	otal	<	:19	1	9-24	2	25-30	3	1-39	4	0+
Characteristics (n)	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
	(n=158)	(n=160)	(n=18)	(n=3)	(n=51)	(n=34)	(n=41)	(n=54)	(n=37)	(n=52)	(n=11)	(n=17)
Age at 1 st sexual contact	(158)	(159)	(18)	(3)	(51)	(33)	(41)	(52)	(37)	(52)	(11)	(17)
Mean	16.5	17.6	15.8	15.0	15.9	15.9	16.6	16.8	17.4	17.8	17.6	18.4
Median	16.0	17.0	16.0	16.0	16.0	16.0	17.0	16.5	17.0	17.0	18.0	18.0
Age when 1 st received money in exchange for sex	(156)	(154)	(17)	(3)	(50)	(32)	(41)	(54)	(37)	(48)	(11)	(17)
Mean	24.2	28.6	16.8	15.7	19.8	18.9	24.3	24.0	28.8	29.1	39.1	39.0
Median	23.0	25.0	17.0	16.0	19.5	18.0	24.0	24.0	31.0	30.0	40.0	39.0
Years working as sex worker	(156)	(154)	(17)	(3)	(50)	(32)	(41)	(54)	(37)	(48)	(11)	(17)
Mean	3.1	3.9	0.94	2.3	1.2	2.3	2.8	3.4	5.4	5.1	4.6	5.4
Have another source of income	(158)	(160)	(18)	(3)	(51)	(34)	(41)	(54)	(37)	(52)	(11)	(17)
No	90.5%	94.4%	94.4%	100%	88.2	100%	95.1%	94.2%	83.8%	94.3%	100%	82.4%
Yes	9.5%	5.6%	5.6		11.8%		4.9	5.6%(3)	16.2%	5.8%(3)	0.0%	17.6%(3)
If yes, what?	(12)	(7)	(1)		(4)		(2)	(2)	(5)	(3)	(0)	(2)
Parents help	1.3%	-	100%		25.0%							
Private business	1.3%	0.6%			25.0%				20.0%			
Trade (products);	1.3%	3.1%			25.0%			100%(2)	20.0%	66.7% (2)		50%(1)
Have a booth (kiosk)	1.3%						50.0%		20.0%			
Dishwasher										33.3% (1)		
Waitress in a bar	0.6%	0.6%			25.0%							50% (1)
Trade in market	0.6%						50.0%					
Pension	0.6%								20.0%			
Housemaid	0.6%								20.0%			
Do you have financial dependents?	(158)	(154)	(18)	(3)	(51)	(31)	(41)	(52)	(37)	(52)	(11)	(16)
No	14.6%	14.4% (23)	38.9%	66.7%	11.8%	25.8%)	17.1%	3.8%	8.1%	5.8%		12.5%
Yes	85.4%	85.6%(137)	61.1%	33.3%(1)	88.2%	74.2%(23)	82.9%	96.2%(50)	91.9%	94.2%(49)	100.0%	87.5%(14)
If yes, how many?	(134)	(137)	(11)	(1)	(44)	(23)	(34)	(50)	(34)	(49)	(11)	(12)
Mean	3.9	3.3	2.8	3.0	3.9	2.4	4.1	3.0	3.8	3.5	4.8	4.8
Age at 1 st commercial sex encounter by age group	bs: F=2.77, 4d	df, p<0.05. (Youn	nger FSW sta	rted at a young	er age than ola	er FSWs.)						

Have financial dependents by age groups: $\chi_2 = 12.21$ (4df), p < 0.05. (A greater % of younger FSWs have financial dependents than older FSWs.)

Table 8: Sexual Behavior of FSWs with Clients.

	Age Groups											
	To	otal	<1	9	19	-24	25	5-30	31	-39	4	0+
	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
	(n=158)	(n=160)	(n=18)	(n=3)	(n=51)	(n=34)	(n=41)	(n=54)	(n=37)	(n=52)	(n=11)	(n=17)
Did you have paying clients in the previous 7 days?	(154)	(157)	(17)	(3)	(50)	(32)	(40)	(53)	(36)	(52)	(11)	(17)
No	8.4%	3.8%		0	14.0%	9.4%	10.0%	0.0%	2.8%	3.9%	9.1%	5.9%
Yes	91.6%	96.2%	100.0%	100%	86.0%	90.6%	90.0%	100%	97.2%	96.1%	90.9%	94.1%
If yes,	(141)	(151)	(17)	(3)	(43)	(29)	(36)	(53)	(35)	(50)	(10)	(16)
Mean	8.3	9.9	6.1	15.7	7.3	8.3	9.5	10.9	8.7	10.4	9.8	6.1
Median	6.0	7.0	5.0	4.0	6.0	6.0	7.5	7.0	5.0	6.5	6.5	6.0
Number of clients during your last business day	(157)	(152)	(18)	(3)	(50)	(33)	(41)	(52)	(37)	(49)	(11)	(15)
Mean	1.9	2.2	2.2	4.3	1.8	2.6	2.1	2.3	1.8	1.9	1.9	1.6
Median	1.0	2.0	1.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0	1.0	1.0
How much last client paid	(154)	(160)	(18)	(3)	(50)	(34)	(40)	(54)	(35)	(52)	(11)	(17)
Mean (in Lari)	35	40	47	52	32	49	35	41	38	37	21	29
Median (in Lari)	30	30	40	30	30	30	30	30	30	30	20	20
Condom use with the last client	(156)	(159)	(18)	(3)	(50)	(34)	(40)	(53)	(37)	(52)	(11)	(17)
Yes	94.9%	94.4%	94.4%	100%	98.0%	94.1%	92.5%	92.3%	94.6%	96.3%	90.9%	94.1%
No	5.1%	5.0%	5.6%		2.0%	5.9%(2)	7.5%	5.8%(3)	5.4%	3.7%(2)	9.1%	5.9%(1)
Who offered the use a condom	(148)	(149)	(17)	(3)	(49)	(31)	(37)	(50)	(35)	(49)	(10)	(16)
My initiative	74.3%	72.5%	70.6%	66.6%	69.4%	77.4%	78.4%	78.6%	82.9%	59.2%	60.0%	87.5%
Client's initiative	1.4%	3.4%			2.0%	6.5%	2.7%	4.0%		2.0%		
Mutual initiative	24.3%	24.2%	29.4%	33.3%	28.6%	16.1%	18.9%	18.0%	17.1%	38.8%	40.0%	12.5%
Reasons for not using condoms during the last paid sexual contact	(8)	(7)	(1)	(0)	(1)	(2)	(3)	(3)	(2)	(2)	(1)	(0)
Did not have	12.5%	28.6%	0.0%	0.0%	0.0%	100%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Too expensive	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Partner refused	50.0%	57.1%	100.0%	0.0%	100.0%	0.0%	33.3%	100%	0.0%	50%	0.0%	0.0%
Don't like it	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Take contraceptives	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Didn't think it was needed (he looked healthy, trust)	37.5%	14.3%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	100.0%	50%	0.0%	0.0%
Didn't think of it	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Condom use with paying clients during the last 30 days	(155)	(153)	(17)	(3)	(50)	(34)	(40)	(53)	(37)	(51)	(11)	(17)
Always	71.6%	84.8%	70.6%	33.3%	78.0%	82.4%	77.5%	90.6%	67.6%	86.3%	36.4%	76.5%
Nearly always	22.65	12.7%	23.5%	66.7%	18.0%	17.6%	20.0%	5.7%	24.3%	9.8%	45.5%	23.5%
Sometimes	5.2%	2.5%	5.9%	0.0%	4.0%	0.0%	2.5%	3.8%	8.1%	3.9%	18.2%	0.0%
Never	0.6%	0.0%		0.0%		0.0%		0.0%		0.0%		0.0%

Table 9: Sexual Behavior of FSWs with Permanent Clients (BSS-2)

			BSS	-2 Age Group)S	
	Total	<19	19-24	25-30	31-39	40 +
	2004	2004	2004	2004	2004	2004
	(n=160)	(n=3)	(n=34)	(n=54)	(n=52)	(n=17)
Has permanent client	(159)	(3)	(33)	(54)	(52)	(17)
No	78.0 (124)	100%	78.8%	77.8%	78.8%	76.5%
Yes	22.0% (35)	0%	21.1%	22.2%	21.2%	23.5%
If yes, number of permanent clients (mean)	3.6		3.9	4.2	3.4	3.6
Number of Sexual Contacts with permanent clients over the last 30 days	(35)	(0)	(8)	(12)	(11)	(4)
Did not have sexual intercourse	0.0%		-		0.0%	
Up to 5 times	62.9%		62.5%	41.7%	90.9%	50%
5-9 times	20.0%		12.5%	41.7%	9.1%	
10-15 times	11.4%		25.0%	8.3%		25%
More than 15	5.4%			8.3%		25%
Don't know/Don't remember						
No response						
The last client was a permanent client	(35)	(20	(3)	(4)	(4)	(2)
Yes	37.1%		33.3%	25%	25%	50%
No	62.9%		66.3%	75%	75%	50%
Condom Use during the last Sexual Contact with permanent client	(39)	(0)	(6)	(15)	(11)	(4)
Yes	92.3%		100%	88.2%	100%	80%
No	7.7%			11.8%	-	20%
Who offered to use a condom	(36)	(0)	(6)	(15)	(11)	(4)
FSWs	66.7%		66.7%	86.7%	45.5%	50%
Partner						
Mutual initiative	33.3%		33.3%	13.3%	54.5%	50%
Don't know						
No response						
Frequency using condoms with permanent partner over last 12 months	(35)	(0)	(8)	(12)	(9)	(3)
Always	88.6%(31)		87.5%(7)	100%(12)	81.8%(9)	75%(2)
Often	8.6%(3)		12.5%(1)		9.1%(1)	25(1)
Sometimes	2.9%(1)				9.1%(1)	
Never						
Don't know						
No response						

Table 10: Sexual Behavior of FSWs with Regular Partners.

		Age Groups										
	Total 2002 2004 20			19	19-2	24	25-	-30	31	-39	40	H
	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
Characteristics (n)	(n=158)	(n=160)	(n=18)	(n=3)	(n=51)	(n=34)	(n=41)	(n=54)	(n=37)	(n=52)	(n=11)	(n=17)
Has regular partner	(158)	(157)	(18)	(3)	(51)	(34)	(41)	(54)	(37)	(50)	(11)	(16)
Yes	57.6%	52.2%	50.0%	33.3%	72.5%	58.5%	58.5%	57.7%	48.6%	46.3%	27.3%	37.5%
No	42.4%	42.8%	50.0%	66.7%	27.5%	41.2%	41.5%	42.3%	51.4%	52.0%	72.7%	62.5%
Number of sexual intercourses with partner over the last 30	(87)	(82)	(8)	(1)	(34)	(20)	(24)	(30)	(18)	(24)	(3)	(6)
days												
Didn't have sex		4.9%						3.2%		12.5%		
Up to 5 times	43.7%	23.2%	25.0%		50.0%	25.0%	45.8%	25.8%	38.9%	20.8%	33.3%	16.7%
5-9 times	18.4%	13.4%	25.0%		17.6%	5.0%	16.7%	6.5%	22.2%	20.8%		33.2%
10-15 times	8.0%	4.5%	12.5%	100%	8.8%	10.0%	4.2%	3.2%	11.1%	0.0%		16.7%
More than 15	27.6%	46.3%	37.5%		20.6%	55.0%	33.3%	51.6%	22.2%	41.7%	66.7%	16.7%
Don't know/can't remember	2.3%	7.3%			2.9%	5.0%		9.7%	5.6%	4.2%		16.7%
Condom use during the last sexual intercourse with partner	(91)	(82)	(9)	(1)	(37)	(20)	(24)	(31)	(18)	(24)	(3)	(6)
Yes	17.6%	14.6%	22.2%	100%	13.5%	15.0%	16.7%	16.1%	22.2%	8.3%	33.3%	16.7%
No	82.4%	85.4%	77.8%	-	86.5%	85.0%	83.3%	83.9%	77.8%	91.7%	66.7%	83.3%
Who offered to use a condom	(16)	(12)	(2)	(1)	(5)	(3)	(4)	(5)	(4)	(2)	(1)	(1)
FSW's initiative	25.0%	58.3%		100%	20.0%	66.7%	25.0%	40.0%	25.0%	100%	100.0%	
Non-paying/regular partners	6.3%							-	25.0%			
Mutual initiative	12.5%	47.7%	50.0%		20.0%	33.3%		60.0%				100%
No response	56.3%		50.0%		60.0%		75.0%	-	50.0%			
Reasons for not using condom during last sexual intercourse	(75)	(70)	(7)	(0)	(32)	(17)	(20)	(26)	(14)	(22)	(2)	(5)
with partner												
Didn't have it	1.3%						5.0%					
Too expensive												
Partner refused	12.3%	31.4%			9.4%	35.3%	10.5%	30.8%	28.6%	27.3%		40.0%
Don't like it	2.7%	14.3%				23.4%	5.3%	19.2%	7.1%	4.5%		
Take Contraceptives	1.4%				3.1%							
Didn't think needed	72.6%	24.3%	83.3%	0	81.2%	82.4%	68.4%	50.0%	50.0%	27.2%	100.0%	20.0%
He looked healthy	n/a	24.3%	n/a		n/a	70.6%	n/a	84.6%	n/a	86.4%	n/a	40.0%
Didn't think of it	2.7%	18.6%		0		35.3%	5.3%	15.4%	7.1%	9.1%		40.0%
Trusted him		78.6%		0		70.6%		84.6%		86.4%		40.0%
Other	4.1%	8.6%		0	3.1%	5.9%	5.3%	11.5%	7.1%	4.5%		20.0%
Frequency of using a condom with regular partner last 12	(73)	(79)	(6)	(1)	(28)	(20)	(21)	(29)	(16)	(23)	(2)	(6)
months												
Always	6.8%	7.6%		100%	7.1%	10.0%	4.8%	3.4%	6.3%	4.3%	50.0%	16.7%
Nearly always	2.7%				7.1%							
Sometimes	13.7%	11.4%	16.7%		7.1%	15.0%	19.0%	20.7%	18.8%			
Never	76.7%	81.0%	83.3%		78.6%	75.0%	76.2%	76.9%	75.0%	95.7%	50.0%	83.3%
Has partner by age groups: $\chi 2$ = 10.46 (4df), p<0.05. (A greater % of younged	er FSWs have	free-of-charge	partners than	older FSWs.)							

Table 11: Access to Condoms for FSWs.

							Age C	Froups				
	To	otal	<]	19	19	-24	25	-30	31-	-39	4	0+
	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
	(n=158)	(n=160)	(n=18)	(n=3)	(n=51)	(n=34)	(n=41)	(n=54)	(n=37)	(n=52)	(n=11)	(n=17)
Never used a condom with any sex partner	1.3%	1.3%	5.6%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	1.9%	0.0%	5.9%
	(2/157)	(2/160)	(1/18)	(0/3)	(0/50)	(0/34)	(1/41)	(0/52)	(0/37)	(1/52)	(0/11)	(1/17)
Where do you go to get condoms												
Pharmacy	87.0% (137)	89.3%(142)	88.2%(15)	100%(3)	80.0%(40)	91.2%(31)	92.7%(38)	82.7%(43)	91.9%(34)	90.6%(48)	90.9%(10)	100.%(17)
Tanadgoma*	60.9%(95)	35.2%(56)	29.4%(5)		64.3%(32)	11.8%(4)	65.9%(27)	44.2%(23)	59.5%(22)	45.3%(24)	81.8%(9)	29.4%(5)
Other places	16.0% (25)	2.6%(4)	17.6%(3)		14.0%(7)		24.4%(10)	1.9%(1)	10.8%(4)	4.7%(3)	9.1%(1)	
Among Girls/co-workers**	14.1% (22)	2.5%(4)	23.5%(4)		14.0%(7)		9.8%(4)	7.7%(4)	5.4%(2)		45.5%(5)	
Bar/Hotels	12.8% (20)	3.1%(5)	17.6%(3)		22.0%(11)	2.9%(1)	4.9%(2)	7.7%(4)	8.1%(3)		9.1%(1)	
Shops	5.1% (8)	3.8%(6)	5.9%(1)		6.0%(3)	5.9.%(2)		3.8%(2)	8.1%(3)	1.9%(1)	9.1%(1)	5.9%(1)
Friends	4.5%(7)		5.9%(1)		6.0%(3)		2.4%(1)		2.7%(1)		9.1%(1)	
Market	1.9%(3)		5.9%(1)				2.4%(1)		2.7%(1)			
Health Center	1.9%(3)	0.6%(1)			2.0%(1)		2.4%(1)		2.7%(1)	1.9%(1)		
Hospital	0.6%(1)								2.7%(1)			
Family Planning Center	0.6%(1)								2.7%(1)			
Saunas/Baths		9.4%(15)				11.8%(4)		11.5%(6)		9.3%(5)		
Time necessary for buying/getting a condom	(148)	(147)	(15)	(2)	(48)	(34)	(41)	(50)	(35)	(47)	(10)	(15)
Less than 5 minutes	75.0%(111)	80.3%(118)	73.3%(11)	100%(2)	74.5%(35)	78.8%(26)	75.6%(36)	78.0%(39)	77.1%(27)	83.0%(38)	70.0%(7)	86.7%(13)
5-15 minutes	18.2%(27)	17.7%(26)	13.3%(2)		23.4%(11)	21.2%(7)	14.6%(6)	20.0%(10)	20.0%(7)	17.0%(8)	10.0%(1)	6.7%(1)
15-30 minutes	6.1%(9)	1.4%(2)	13.3%(2)		2.1%(1)		7.3%(3)	2.0%(1)	2.9%(1)		20.0%(2)	6.7%(1)
30 minutes or more	0.7%(1)	0.7%(1)					2.4%(1)			1.9%(1)		
Number of condoms FSWs have with them	(152)	(160)	(17)	(3)	(50)	(33)	(40)	(54)	(34)	(52)	(11)	(17)
or at place of work												
None	53.9%	45.6%	70.6%	100%	60.0%	70.6%	45.0%	42.6%	50.0%	28.8%	45.5%	47.1%
Yes	46.1%	54.4%	29.4%	0.0%	40.0%	29.4%	55.0%	57.4%	50.0%	71.2%	55.5%	52.9%
Minimum	1	1	1		1	1	1	1	1	1	1	1
Maximum	100	34	2		8	10	50	34	100	12	7	10
Mean	5.6	3.9	1.2		3.3	2.5	6.7	4.7	8.9	3.4	4.2	4.9
*\2= 9.988 (4df), p<.04 (10%<5) in the BSS-1												
** \$\2= 13.071 (4df), p<.01 20%<5) in the BSS-1												

Table 12: Violence among FSWs in BSS-1.

			BSS	5-1		
	Total					
		<19	19-24	25-30	31-39	40 +
	(n=158)	(n=18)	(n=51)	(n=41)	n=37	(n=11)
FSWs experienced either sexual or physical violence during	42.4% (67)	50.0% (9)	49.0% (25)	34.1% (14)	40.5% (15)	36.4% (4)
last year						
Sexual violence (rape)	37.3%(25)	33.3% (3)	32.0% (8)	42.9% (6)	40.0% (6)	50.0% (2)
Physical violence	20.9%(14)	11.1% (1)	32.0% (8)	21.4% (3)	13.3% (2)	50.0% (2)
Sexual & physical violence	41.8%(28)	55.6% (5)	36.0% (9)	35.7% (5)	46.7% (7)	
Person who was violent	(42)	(6)	(17)	(8)	(9)	(2)
Client	52.4%(22)	66.7%(4)	52.9%(9)	50.%(4)	55.6%(5)	
Policemen	26.2%(11)	50.0%(3)	17.6%(3)	25%(2)	11.1%(1)	100%(2)
Other	11.9%(5)		11.8%(2)	12.5%(1)	22.2%(2)	
Stranger	9.5%(4)		16.7%(1)	11.8%(2)	11.1%(1)	
Regular partner	7.1%(3)		11.8%(2)	12.5%(1)		
Husband						
Pimp						

Table 13: Violence among FSWs in Tbilisi in BSS-2.

				Age Groups		
		<19	19-24	25-30	31-39	40+
	(n=160)	(n=3)	(n=34)	(n=54)	(n=52)	(n=17)
FSWs experienced either sexual or physical violence during last year	29.4% (47)	33.3% (1)	41.2%(14)	24.1(13)	25.0%(13)	35.3%(6)
Sexual violence (rape)	17.0% (8)	100%(1)	7.1%(1)	30.8%(4)	15.4%(2)	
Physical violence	34.0% (16)		37.5%(5)	23.1%(3)	38.5%(5)	50.0%(3)
Sexual & physical violence	48.9% (23)		57.1%(8)	46.2%(6)	46.2%(6)	50.0%(3)
FSWs victims of physical violence (Beating, bothering, etc.)	24.4%(39)	-	38.2%(13)	16.7%(9)	21.2%(11)	35.3%(6)
Person who made physical violence to FSWs	(39)	(0)	(13)	(9)	(11)	(6)
Client	51.3%(20)		69.2%(9)	55.6%(5)	45.5%(5)	16.7%(1)
Lover	5.1%(2)			22.2%(2)		
Husband						
Pimp						
Policemen	15.4%(6)		7.7%(1)	11.1%(1)	9.1%(1)	33.3%(2)
Stranger	10.3%(4)		15.4%(2)		9.1%(1)	16.7%(1)
Other						
No response	20.5%(8)		7.7%(1)	11.1%(1)	36.4%(4)	33.3%(2)
FSWs victims of sexual violence through blackmailing or threatening	19.4%(31)	33.3%(1)	26.5%(9)	18.5%(10)	15.4%(8)	17.6%(3)
Person who made sexual violence through blackmailing to FSWs	(31)	(1)	(9)	(10)	(8)	(3)
Client	32.3%(10)		55.6%(5)	20.0%(2)	25.0%(2)	33.3%(1)
Lover						
Husband	3.2%(1)			10.0%(1)		
Pimp						
Policemen	19.4%(6)		22.2%(2)	40.0%(4)		
Stranger	16.1%(5)		11.1%(1)	10.0%(1)	25.0%(2)	33.3%(1)
Other	9.7%(3)	100%(1)			12.5%(1)	33.3%(1)
No response	19.4%(6)		11.1%(1)	20.0%(2)	37.5%(3)	
FSWs victims of forced sexual intercourse/rape n=160	6.9%(11)	0.0% (0)	11.8%(4)	9.3%(5)	3.8%(2)	0.0% (0)
Person who forced FSW to sexual intercourse or raped her	(11)		(4)	(5)	(2)	
Client	18.2%(2)		25.0%(1)	20.0%(1)		
Lover						
Husband						
Pimp						
Policemen	27.3%(3)		25.0%(1)	20.0%(1)	50.0%(1)	
Stranger	18.2%(2)		25.0%(1)	20.0%(1)		
Other	9.1%(1)		25.0%(1)			
No response	27.3%(3)			40.0%(2)	50.0%(1)	

Table 14: STI Knowledge and Health Seeking Behavior among FSWs.

		Age Groups Total <19 19-24 25-30 31-39										
	To	tal	<	19	19	-24	25	-30	31-	39	40)+
	2002 (n=158)	2004 (n=160)	2002 (n=18)	2004 (n=3)	2002 (n=158)	2004 (n=34)	2002 (n=41)	2004 (n=54)	2002 (n=37)	2004 (n=52)	2002 (n=11)	2004 (n=17)
Aware of STIs	99.4%(157)	100.0%(160)	94.4%(17)	100.0%(3)	100%(51)	100%(34)	100%(41)	100%(54)	100%(36)	100%(52)	100%(11)	100%(17)
Knowledge of STI symptoms observed among women	(149)	(160)	(17)	(3)	(47)	(34)	(39)	(54)	(36)	(52)	(10)	(17)
Abnormal vaginal discharge	71.8%(107)	54.3%(87)	64.7%(11)	66.7%(2)	76.6%(36)	47.1%(16)	67.5%(27)	55.5%(30)	69.4%(25)	57.7%(30)	80.0%(8)	52.9%(9)
Burning on urination	38.2%(57)	27.5%(44)	41.2%(7)	33.3%(1)	53.2%(25)	32.4%(11)	35.0%(14)	27.8%(15)	25.0%(9)	25.0%(13)	20%(2)	23.5%(4)
Vulva itching	32.9%(49)	15.0%(24)	11.8%(2)	0%	42.6%(20)	8.8%(3)		22.2%(12)	22.2%(8)	23.1%(12)	60%(6)	11.8%(2)
Vaginal ulcer	17.4%(26)	5.0%(8)		33.3%(1)	19.1%(9)	2.9%(1)	12.5%(5)	5.6%(3)	22.2%(8)	1.9%(1)	10.0%(1)	11.8%(2)
Lower abdomen pain	15.4%(23)	16.3%(26)		33.3%(1)	17.0%(8)	14.7%(5)	22.5%(9)	14.8%(8)	8.6(3)	19.2%(10)	30.0%(3)	11.8%(2)
Other	14.1%(21)	19.4%(30)	5.9%(1)		17.0%(8)	11.8%(4)	12.5%(5)	24.1%(13)	16.7%(6)	1.9%(1)	10.0%(1)	47.1%(8)
Genital eruption	10.7%(16)		11.8%(2)		6.4%(3)		5.0%(2)		16.7%(6)			
Odor	10.1%(15)	3.1% (5)	17.6%(3)		12.8%(6)		32.5%(13)	4.7% (2)	11.1%(4)			
Know at least one symptom	91.9%(137)	72.5%(116)	76.5%(13)	66.7%(2)	95.7%(45)	61.8%(21)	94.9%(37)	75.9%(41)	94.3%(33)	73.1%(38)	90.0%(9)	100%
Do not know any	8.1%(12)	27.5%(44)	23.5%(4)	33.3%(1)	4.2%(2)	38.2%(13)	7.5%(3)	20.4%(11)	5.6%(2)	26.9%(14)	10.0%(1)	
Knowledge of STI symptoms observed among men	(129)	(160)	(13)	(3)	(38)	(34)	(37)	(54)	(30)	(52)	(11)	(17)
Urethral discharge	60.5%(78)	33.8%(54)	38.5%(5)	0%	71.1%(27)	26.5%(9)	56.8%(21)	24.1%(13)	60.0%(18)	44.4%(24)	63.6%(7)	47.1%(8)
Burning on urination	20.1%(30)	17.5%(28)	30.8%(4)	33.3%(1)	26.3%(10)	14.7%(5)	24.3%(9)	16.7%(9)	16.7%(5)	16.7%(9)	18.2%(2)	23.5%(4)
Itching	14.7%(19)	5.0%(8)	7.7%(1)	0	15.8%(6)	8.8%(3)	13.5%(5)	1.9%(1)	6.7%(2)	7.4%(4)	45.4%(5)	0
Genital ulcer	10.1%(13)	5.0%(8)		0	10.5%(4)	2.9%(8)	13.5%(5)	3.8%(2)	10.0%(3)	5.6%(3)	9.1%(1)	11.8%(2)
Other	7.8%(10)	11.3%(18)		0	10.5%(4)	2.9%(1)	2.7%(1)	16.7%(9)	13.3%(4)	9.3%(5)	9.1%(1)	17.6%(3)
Eruption	6.2%(8)	1.3%(2)	7.7%(1)	0	5.3%(2)	0	5.4%(2)	1.9%(1)	10.0%(3)	1.9%(1)		0
Odor	3.9%(5)				5.3%(2)		2.7%(1)		6.7%(2)			
Obtain/maintain erection	0.8%(1)						2.7%(1)					
Know at least one symptom	80.6%(104)	48.1%(77)	61.5%(8)	33.3%(1)	89.5%(34)	41.2%(14)	75.5%(28)	42.6%(23)	83.3%(25)	55.8%(29)	81.8%(9)	58.8%(10)
Do not know any	19.4%(25)	51.9%(83)	38.5%(5)	66.7%(2)	10.5%(4)	58.8%(20)	24.3%(9)	57.4%(31)	16.7%(5)	44.2%(23)	18.2%(2)	41.2%(7)
Had STI symptoms in the last 12 months	(155)	(160)	(17)	(3)	(50)	(34)	(41)	(52)	(36)	(52)	(11)	(17)
Abnormal vaginal discharge	70.3%(109)	54.4%(87)	70.6%(12)	33.3%(1)	70.0%(35)	52.9%(18)	78.0%(32)	53.8%(28)	63.9%(23)	65.4%(34)	63.6%(7)	35.3%(6)
Vaginal ulcer/boil	11.0%(17)	6.9%(11)	17.6%(3)	33.3%(1)	10.4%(5)	97.1%(33)	14.6%(6)	5.8%(3)	8.1%(3)	13.5%(7)		-
Received treatment at:	(111)	(88)	(13)	(1)	(35)	(18)	(32)	(31)	(24)	(32)	(/)	(6)
State clinic/hospital	56.8%(62)	45.5%(40)	53.8%(7)	100%/	57.1%(20)	55.6%(10)	62.5%(20) 52.1%(17)	41.9%(13)	50.0%(12)	46.9%(15)	5/.1%(4)	33.3%(2)
Applied self-treatment	50.0%(56) 40.5%(44)	31.8%(28) 36.4%(32)	40.2%(0) 38.5%(5)	100%	36.9%(14) 34.3%(12)	27.8%(3) 50.0%(9)	55.1%(17) 43.8%(14)	12.9%(4) 20%(0)	50.0%(10)	25.0%(8) 34.4%(11)	42.9%(3) 28.6%(2)	33.3%(2)
Private clinic/hospital	12.6%(13)	15.9%(14)	7 7%(1)		17.1%(6)	27.8%(5)	12.5%(4)	16.1%(5)	4 1%(1)	12.5%(4)	28.6%(2)	
Traditional healer	4.5%(5)	1.1%(1)	7.7%(1)		2.9%(1)	5.8%(1)			8.3%(2)		14.3%(1)	
Mean # treatment options used	2.1	2.2	1.8	1.0	1.9	1.8	2.3	2.1	2.3	2.2	2.3	2.1
Sexual behavior during symptomatic period	(111)	(88)	(13)	(1)	(36)	(18)	(32)	(31)	(24)	(32)	(7)	(6)
Used condoms	67.3%(74)	56.8%(50)	61.5%(8)	100%(1)	76.5%(26)	38.9%(7)	65.6%(21)	61.3%(19)	62.5%(15)	59.4%(19)	57.1%(4)	66.7%(4)
Stopped intercourse	57.7%(64)	36.4%(32)	46.2%(6)		48.6%(17)	38.9%(7)	71.9%(23)	38.7%(12)	61.5%(15)	31.3%(10)	42.9%(3)	50.0%(3)
Told sexual partner about STI	50.5%(56)	25.0%(22)	23.1%(3)		45.7%(16)	33.3%(6)	62.5%(20)	32.2%(10)	54.2%(13)	12.5%(4)	57.1%(4)	33.3%(2)

Table 15: HIV/AIDS Knowledge and Testing Among FSWs.

							Age Groups					
	To	otal	<1	9			25	-30	31	-39	40	
		2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
	(n=158)	(n=160)	(n=18)	(n=3)	(n=51)	(n=34)	(n=41)	(n=54)	(n=37)	(n=52)	(n=11)	(n=17)
Awareness of HIV/AIDS	98.1%(155)	94.4%(151)	100%(18)	66.7%(2)	98.0%(50)	97.1%(33)	95.1%(39)	94.4%(51)	100%(37)	94.2%(49)	100.0%(11)	94.1%(16)
Know Person w/ HIV/AIDS	(154)	(151)	(17)	(2)	(50)	(34)	(39)	(51)	(37)	(49)	(11)	(16)
Yes	8.4%(13)	15.9%(24)	11.8%(2)	0	8.0%(4)	12.1%(4)	10.3%(4)	19.6%(10	5.4%(2)	20.4%(10)	9.1%(1)	0%(0)
If yes, a close friend or relative (yes)	1.9%(3)	20.8%(5)			2.0%(1)	25.0%(1)	2.6%(1)	20.0%(2)	2.7%(1)	20.0%(2)		
Key HIV/AIDS Knowledge	(155)	(151)	(18)	(2)	(50)	(33)	(39)	(49)	(37)	(37)	(11)	(16)
Needle/syringe sharing	91.0%(141)	89.4%(135)	83.3%(15)	100%(2)	96.0%(48)	84.8%(28)	89.7%(35)	90.2%(46)	89.2%(33)	91.8%(45)	90.9%(10)	87.5%(14)
Abstinence	63.6%(98)	47.7%(72)	50.0%(9)	0	64.0%(32)	39.4%(13)	52.6%(20)	51.0%(26)	78.4%(29)	51.0%(25)	72.7%(8)	50.0%(8)
Correct condom use	63.9%(98)	66.2%(100)	66.7%(12)	0	62.0%(31)	57.6%(19)	69.2%(27)	68.6%(35)	59.5%(22)	73.5%(36)	63.6%(7)	62.5%(10)
One faithful partner	60.6%(94)	49.0%(74)	44.4%(8)	0	66.0%(33)	36.4%(12)	59.0%(23)	58.8%(30)	59.5%(22)	49.0%(24)	72.7%(8)	50.0%(8)
Mosquito bites (no)	16.1%(25)	23.8%(36)	11.1%(2)	100%(2)	14.0%(7)	30.3%(10)	10.3%(4)	19.6%(10)	24.3%(9)	22.4%(11)	27.3%(3)	18.8%(2)
Meal-sharing (no)	11.6%(17)	23.8%(36)	16.7%(3)	0	10.0%(5)	21.2%(7)	7.7%(3)	19.6%(10)	13.5%(5)	30.6%(15)	18.2%(2)	25.0%(4)
All Items Correct	0.6%(1)	1.3%(2)	0.0%	0.0%	0.0%	0.0%	2.6%(1)	3.8%(2)	0.0%	0.0%	0.0%	0.0%
MTCT during pregnancy	91.6%(142)	91.4%(138)	89.9%(16)	50.0%(1)	90.0%(45)	93.9%(36)	92.3%(36)	88.2%(45)	94.6%(35)	91.8%(45)	90.9%(10)	100%(16)
Through breastfeeding	78.1%(121)	72.8%(110)	78.9%(15)	50.0%(1)	72.0%(36)	69.7%(23)	82.1%(32)	74.5%(38)	78.4%(29)	71.4%(35)	81.8%(9)	81.3%(13)
Actions for reducing risk of MTCT	(141)	(138)	(16)	(1)	(45)	(31)	(35)	(45)	(35)	(45)	(10)	(16)
Don't know	35.5%(50)	42.0%(58)	56.3%(9)	100%(1)	33.3%(15)	45.2%(14)	40%(14)	44.8%(20)	31.4%(11)	33.3%(15)	10.0%(1)	50.0%(8)
Abortion	27.7%(39)	14.5%(20)	18.8%(3)		28.9%(13)	6.5%(2)	20%(7)	15.6%(7)	34.3%(12)	17.0%(8)	40.0%(4)	18.8%(3)
Take ARVs	24.8%(35)	34.8%(48)	25.0%(4)		20.0%(9)	38.7%(12)	28.6%(10)	26.7%(12)	25.7%(9)	42.2%(19)	30.0%(3)	31.3%(5)
Nothing	5.7%(8)	3.6%(5)			4.4%(2)	6.5%(2)	8.6%(3)	2.2%(1)	2.9%(1)	4.4%(2)	20.0%(2)	
Receive treatment	3.5%(5)	1.4%(2)			6.7%(3)		2.9%(1)	4.5%(2)	2.9%(1)			
See physician	2.1%(3)	2.8%(4)			4.4%(2)			4.5%(2)	2.9%(1)			
Refrain from sex	0.7%(1)				2.2%(1)							
Knowledge of STI/HIV prevention routes	(157)	(151)	(18)	(2)	(50)	(330	(41)	(49)	(37)	(51)	(11)	(16)
Condom use	81.5%(128)	86.8%(131)	77.8%(14)	50.0%(1)	70.0%(35)	81.8%(27)	80.5%(33)	87.8%(43)	94.6%(35)	90.2%(46)	100%(11)	87.5%(14)
Don't know	9.6%(15)	7.9%(12)	16.7%(3)		14.0%(7)	12.1%(4)	9.8%(4)	10.2%(5)		3.9%(2)		6.3%(1)
Avoiding sexual contacts	8.9%(14)	1.3%(2)	5.6%(1)		14.0%(7)		7.3%(3)		2.7%(1)		9.1%(1)	6.3%(1)
Safe forms of sex	6.4%(10)	1.3%(2)			6.0%(3)		9.8%(4)	2.0%(1)		2.0 (1)	9.1%(1)	
Sex with one faithful partner	2.5%(4)	2.6%(4)			6.0%(3)			2.0%(1)		3.9%(2)	9.1%(1)	6.3%(1)
Other STI/HIV routes	(158)	(151)	(18)	(2)	(51)	(33)	(41)	(49)	(37)	(51)	(11)	(16)
A person with blood group A can get STI/HIV	58.9%(93)	33.1%(50)	55.6%(10)	50.0%(1)	51.0%(26)	45.5%(15)	61.0%(25)	28.6%(14)	64.9%(24)	29.4%(15)	72.7%(8)	31.3%(5
Don't know	25.9%(41)	16.6%(25)	38.9%(7)	0	25.5%(13)	21.2%(7)	24.4%(10)	24.5%(12)	24.3%(9)	7.8%(4)	18.2%(2)	12.5%(2)
A person looking healthy can't be infected with HIV	6.5%(10)	5.6%(9)	11.1%(2)	0	9.8%(5)	5.9%(2)	2.6%(1)	5.8%(3)	2.7%(1)	5.6%(3)	9.1%(1)	5.9%(1)

Characteristics, High-Risk Behaviors and Knowledge of STI/HIV/AIDS of Street Based Female Sex Workers in Thilisi, Georgia: 2002 - 2004

							Age	e Groups				
	To To	otal	<1	9	19	-24	25	-30	31	-39	40)+
	2002	2004	2002	2004	2002	2004	2002		2002	2004	2002	2004
	(n=158)	(n=160)	(n=18)	(n	(n=51)	(n	(n=41)	(n	(n=37)	((n=11)	
Knows HIV testing site in a community	(155)	(151)	(18)	(2)	(50)	(33)	(39)	(51)	(37)	(49)	(11)	(16)
Yes	80.6%(125)	83.4%(126)	72.2%(13)	100%(2)	78.0%(39)	81.8%(27)	82.1%(31)	84.3%(43)	83.8%(31)	77.6%(38)	90.9%(10)	100%(16)
No	11.6%(18)	3.3%(5)	16.7%(3)		12.0%(6)	3.0%(1)	10.3%(4)	3.9%(2)	13.5%(5)	4.1%(2)		
Don't know	7.7%(12)	13.2%(20)	11.1%(2)		10.0%(5)	15.2%(5)	7.7%(3)	11.8%(6)	2.7%(1)	18.4%(9)	9.1%(1)	
Confidential HIV test												
Had test	51.6%(80)	59.6%(90)	44.4%(8)		50.0%(25)	54.5%(18)	56.4%(22)	64.7%(33)	45.9%(17)	63.3%(31)	72.7%(8)	50.0%(8)
Voluntary took test	85.0%(68)	96.7%(87)	62.2%(5)		88.0%(22)	100%(18)	86.4%(19)	93.9%(31)	88.2%(15)	96.8%(30)	87.5%(7)	100%(8)
Received result of test	97.4%(76)	96.7%(87)	100%(7)		100%(25)	100%(18)	100%(22)	93.9%(31)	88.2%(15)	96.8%(30)	87.5%(7)	100%(8)
Time of the last HIV test	(78)	(88)	(7)		(25)	(18)	(22)	(33)	(17)	(32)	(7)	(7)
This year	74.4%(58)	44.3%(39)	71.4%(5)		72.0%(18)	44.4%(8)	95.5%(21)	45.5%(15)	52.9%(9)	37.5%(12)	71.4%(5)	57.1%(4)
1-2 yrs ago	11.5%(9)	40.9%(36)	28.6%(2)		12.0%(3)	50.0%(9)	4.5%(1)	36.4%(12)	17.6%(3)	43.8%(14)	14.3%(1)	28.6%(2)
2-4 yrs ago	10.3%(8)	9.1%(8)			12.0%(3)			15.2%(5)	23.5%(4)	6.3%(2)		14.3%(1)
>4 yrs ago	3.8%(3)	4.4%(4)			4.0%(1)			3.0%(1)	5.9%(1)	9.4%(3)	14.3%(1)	
Don't remember		1.1%(1)				5.6%(1)						

Table 16: Attitude of FSWs towards Persons with HIV/AIDS.

]	otal Age Groups <19 19-24 25-30 31-39 40+										
			<1	9	1	19-24	:	25-30		31-39		40 +
	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
	(n=158)	(n=160)	(n=18)	(n=3)	(n=51)	(n=34)	(n=41)	(n=54)	(n=37)	(n=52)	(n=11)	(n=17)
Tell someone about test results	N/A	63.2%(55/87)	N/A		N/A	55.6%(10/18)	N/A	74.2%(23/31)	N/A	56.7%(17/30)	N/A	62.5%(5/18)
Whom did you tell the test results	N/A	(52)	N/A		N/A	(10)	N/A	(20)	N/A	(17)	N/A	(5)
Client/clients		7.7%(4)								11.8%(2)		40.%(2)
Permanent client/clients		5.8% (3)								17.6%(3)		
Permanent partner/partners		15.4% (8)				10.%(1)		10%(2)		23.5%(4)		20.%(1)
Colleague sex workers		11.5% (6)				10.%(1)		10%(2)		11.8%(2)		20.%(1)
Family members		19.2%(10)				30.%(3)		20%(4)		17.6%(3)		
Relatives		3.8% (2)						10%(2)				
Friends		59.6% (31)				70.%(7)		65%(13)		47.1%(8)		60%(3)
Nobody		1.8% (1)						5.0%(1)				
Other		1.8% (1)										
Whom you would tell if you receive HIV positive	N/A	(151)	N/A	(1)	N/A	(33)	N/A	(51)	N/A	(49)	N/A	(16)
Nobody		23.2%(35)				15.2%(5)		25.5%(13)		26.5%(13)		25.0%(4)
Client		7.4%(9)				8.0%(2)		7.5%(3)		7.0%(3)		7.1%(1)
Permanent client		13.1%(16)				16.0%(4)		7.5%(3)		16.7%(7)		14.3%(2)
Permanent partner		31.1%(38)				32.0%(8)		27.5%(11)		33.3%(14)		35.7%(5)
Family member		28.7%(35)		100%(1)		36.0%(9)		25.1%(10)		21.4%(9)		42.9%(6)
Relative		8.2%(10)				4.0%(1)		10.3%(4)		9.5%(4)		7.1%(1)
Colleague		26.2%(32)				32.0%(8)		27.5%(11)		23.8%(10)		21.4%(3)
Friend		27.9%(34)				20.0%(5)		25.0%(10)		33.3%(14)		35.7%(5)

Table 17: Sources of Information on STI/HIV.

							Age	Groups				
	To	otal	<1	9	19	-24	25	-30	31	-39	40)+
	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
	(n=158)	(n=160)	(n=18)	(n=3)	(n=51)	(n=34)	(n=41)	(n=54)	(n=37)	(n=52)	(n=11)	(n=17)
Number of FSWs received information on	93.0%(147)	94.4%(151)	77.8%(14)	66.7%(2)	94.1%(48)	97.1%(33)	92.7%(38)	94.2%(49)	97.3%(36)	94.4%(51)	100.0%(11	94.1%(16)
HIV/AIDS												
Source of information about AIDS	(147)	(151)	(14)	(2)	(48)	(33)	(38)	(49)	(36)	(51)	(11)	(16)
TV.	41.5%(61)	54.4%(87)	28.6%(4)	50.0%(1)	33.3%(16)	38.2%(13)	47.4%(18)	55.1%(27)	50.0%(18)	66.7%(34)	45.5%(5)	75.0%(12)
Social workers	36.7%(53)	32.5%(49)	35.7%(5)		39.6%(19)	30.3%(10)	36.8%(14)	40.8%(20)	38.9%(14)	35.3%(18)	18.2%(2)	37.5%(6)
Friends/relatives	34.0%(50)	23.2%(35)	50.0%(7)		31.3%(15)	36.4%(12)	26.3%(10)	18.4%(9)	36.1%(13)	21.6%(11)	27.3%(3)	37.5%(6)
Magazines/journals	25.2%(37)	16.6%(25)	28.6%(4)		20.8%(10)	6.1%(2)	31.6%(12)	12.2%(6)	25.0%(9)	23.5%(12)	18.2%(2)	31.3%(5)
Other	25.2%(37)	4.6%(7)	21.4%(3)		25.0%(12)	6.1%(2)	26.3%(10)	2.0%(1)	16.7%(6)	3.9(2)	45.5%(5)	
Clients	10.2%(15)		7.1%(1)		10.4%(5)		10.5%(4)		13.9(5)			
Family member	3.4%(5)	0.6%(1)	7.1%(1)		6.2%(3)			2.0%(1)			9.1%(1)	
Frequency of listening to radio during last 4	(158)	(160)	(18)	(3)	(51)	(34)	(41)	(52)	(37)	(52)	(11)	(17)
weeks												
Every day	40.5%(64)	41.9%(67)	33.3%(6)		49.0%(25)	29.4%(10)	41.5%(17)	44.2%(23)	35.1%(13)	50.0%(27)	27.3%(3)	41.7%(7)
Not less than once a week	10.1%(16)	11.9%(19)	16.7%(3)	33.3%(1)	13.7%(7)	2.9%(1)	4.9%(2)	15.4%(8)	10.8%(4)	9.3%(5)		23.5%(4)
Less then once a week	7.0%(11)	7.5%(12)	5.6%(1)		9.8%(5)	17.6%(3)	7.3%(3)	3.8%(2)	5.4%(2)	5.6%(3)		5.9%(1)
Never within the last 4 weeks	41.8%(66)	36.9%(59)	44.4%(8)	66.7%(2)	27.5%(14)	47.1%(16)	43.9%(18)	36,5%(19)	48.6%(18)	31.5%(17)	72.7%(8)	29.4%(5)
Frequency of watching TV during the last 4 weeks	(157)	(160)	(18)	(3)	(50)	(34)	(41)	(52)	(37)	(54)	(11)	(17)
Every day	51.6%(81)	70.6%(113)	66.7%(12)	33.3%(1)	46.0%(23)	55.9%(19)	48.8%(20)	75.0%(39)	59.5%(22)	77.8%(42)	36.4%(4)	70.6%(12)
Not less than once a week	20.4%(32)	12.5%(20)	11.1%(2)	33.3%(1)	26.0%(13)	11.8%(4)	22.0%(9)	11.5%(6)	18.9%(7)	11.1%(6)	9.1%(1)	17.6%(3)
Less then once a week	8.3%(13)	6.3%(10)	5.1%(1)	()	6.0%(3)	17.6%(6)	12.2%(5)	5.8(3)	10.8%(4)	1.9%(1)		
Never within the last 4 weeks	19.7%(31)	9.4%(15)	16.7%(3)	33.3%(1)	22.0%(11)	11.8%(4)	17.1%(7)	7.7%(4)	10.8%(4)	7.4%(4)	54.4%(6)	12.8%(2)
Would you take care of your woman relative HIV	47.7%	36.4%	50.0%	50%(1)	46.0%	45.5%	53.8%	21.6%	37.8%	40.8%	63.6%	50.0%
patient at your place?	(74/155)	(55/151)	(9/18)		(23/50)	(15/33)	(21/39)	(11/51)	(14/37)	(20/49)	(7/11)	(8/16)
Would you take care of your male relative HIV	47.1%	36.4%	50.0%	0	44.0%	45.5%	51/3%	23.5%	40.5%	40.9%	63.6%	50.0%
patient at your place?	(73/155)	(55/151)	(9/18)		(22/50)	(15/33)	(2/39)	(12/51)	(15/37)	(20/49)	(7/11)	(8/16)
Would you keep secret if a family member is HIV	45.8%	48.3%	33.3%	0	64.0%	51.5%	46.2%	49.0%	27.0%	51.0%	45.5%	37.5%
positive?	(71/155)	(73/151)	(6/18)		(32/50)	(17/33)	(18/39)	(25/51)	(10/37)	(25/49)	(5/11)	(6/16)
A student with HIV has a right to continue study.	22.6%	23.8%	27.8%	50%(1)	14.0%	30.3%	25.6%	15.7%	27.0%	26.5%	27.3%	25.0%
	(35/155)	(36/151)	(5/18)		(7/50)	(10/33)	(10/39)	(8/51)	(10/37)	(13/49)	(3/11)	(4/16)
HIV infected teacher has a right to continue	20.6%	15.9%	16.7%	0	16.0%	21.1%	23.1%	7.8%	18.9%	18.4%	45.5%	25.0%
teaching.	(32/155)	(24/151)	(3/18)		(8/50)	(7/33)	(9/39)	(4/51)	(7/37)	(9/49)	(5/11)	(4/16)
Would you like to have a meal with person with	12.3%	10.6%	5.6%	0	6.0%	9.1%	12.8%	7.8%	18.9%	12.2%	27.3%	18.8%
STI/HIV?	(19/155)	(16/151)	(1/18)		(3/50)	(3/33)	(5/39)	(4/51)	(7/37)	(6/49)	(3/11)	(3/16)
Would you buy food from HIV positive salesman?	9.0%	8.6%	11.1%	0	6.0%	12.1%	7.7%	5.9%	13.5%	8.2%	9.1%	12.5%
	(14/155)	(13/151)	(2/18)		(3/50)	(4/33)	(3/39)	(3/51)	(5/37)	(4/49)	(1/11)	(2/16)

Table 18: STI/HIV Prevalence among FSWs

	Total		Age Groups									
			<19		19-24		25-30		31-39		40 +	
	2002 (n=158)	2004 (n=160)	2002 (n=18)	2004 (n=3)	2002 (n=51)	2004 (n=34)	2002 (n=41)	2004 (n=54)	2002 (n=37)	2004 (n=52)	2002 (n=11)	2004 (n=17)
Syphilis (RPR, TPHA with ELISA confirmation)	28.8% (44/153)	48.7% (77/158)	5.6% (1/18)	33.3% (1)	28.0% (14/50)	35.5% (12)	38.5% (15/39)	59.6% (31)	33.3% (12/36)	48.1% (26)	20.0% (2/10)	52.9% (9)
Chlamydia trachomatis **	25.3% (40/155)	22.3% (35/157)	27.8% (5/18)		31.4% (16/51)	50.0% (17)	24.4% (10/41)	9.6% (5)	25.0% (9/36)	22.2% (12)	0.0% (0/9)	5.9% (1)
Neisseria gonorrhoeae *	17.4% (27/155)	22.3% (35/157)	38.9% (7/18)	33.3% (1)	17.6% (9/51)	41.2% (14)	17.1% (7/41)	17.3% (9)	8.3% (3/36)	14.8% (8)	11.1% (1/9)	17.6% (3)
HIV (ELISA with Western Blot confirmation)	0 (0/153)	1.3% (2/158)	0		0		0	1.9% (1)	0		0	5.9% (1)
$\chi^{2}_{\mu} = 26.943 (8df), p<.001; \chi^{2}_{\mu} = 23.698 (4df), p<.000 for the BSS-2$												

Survey Questionnaire

Questionnaire ID Number:	
Questionnaire is Coded as:	
Questionnaire is Word Processed by:	

HIV/AIDS/STI Behavior Surveillance Survey (BSS) Female Commercial Sex Workers Tbilisi 2004

Organization: Tanadgoma

Interviewer: Please specify the location of the interview and the respondent's ID code.

Respondent's ID Code		
Selection Point		
Code of strata/identification <i>:</i>		

Interviewer's Code

Introduction: "My name is_______. An American and a Georgian organization implement a joint project titled "AIDS and Sexually Transmitted Diseases Prevention in Georgia". The project is funded by the United States Agency for International Development (USAID). This survey is aimed at exploring the existing situation. The questionnaire has been designed by our counterparts from the US. Has anybody taken an interview over the last five weeks for this study? If somebody has already taken an interview from the person you are talking to over the BBPS period, don't take another one. Tell him/her, that you cannot re-interview him/her. Thank the person and finish conversation. If nobody has taken an interview from the person in question, continue as follows:

Confidentiality and consent: "I am planning to ask you several questions that are hard to answer by some people. Your responses will be kept confidential. The questionnaire will not show your name and will never be referred to in connection with the information that you will share with us. You are not obliged to answer all my questions, and whenever you wish you may refuse to answer my questions. You may finish the interview at any time per you desire. However, we would love to note that your answers would help us better understand what people think, say and do in view of certain types of behavior. We would highly appreciate your input to this study.

Interviewer's Code:

(Interviewer's signature certifying that the respondent has verbally agreed to the interview)

	Respondent 1	Respondent 2	Respondent 3
Date			
Interviewer			
Result			

Result Codes: Completed – 1; Partially Completed – 2; Previously Interviewed – 3; Refusal – 4; Other – 5 Q1.Date and time of interview: /____/date/___/hour/___/minute/

Signature: _____ Date _____

Q2. City: 1. Tbilisi 2. Batumi

Feminine Commercial Sex Workers Questionnaire:

1. Did you participate in the survey that Tanadgoma conducted in 2002 and that implied filling out the questionnaire and providing blood and urine samples for the testing?

Yes	I (Continue)
No	2 (Go to A1)
Don't remember	3 (Go to A1)
No response	99 (Go to A1)

2. If you did participate in that survey, did you come to get results of your tests?

Yes	 1 (Go to A1)
No	2 (Continue)
Don't remember	3 (Go to A1)
No response	99 (Go to A1)

3.	If you did not come to get your results, what was the reason for that? (Don't read)	
	I forgot	1
	I was not interested in the results	2
	I was afraid of the positive results	3
	I could not manage to come	4
	In my opinion, I did not need testing at all (I was healthy I had no symptoms)	5
	Don't know	6
	Other (please specify)	7
	No response	99

A: Personal Data

A1. How old are you?

/____/ (please specify an exact age) No response 99

A2. Please specify the date of birth (Compare with A1, if necessary!)

/	//_		/	•
Day	Month	Year		
-	Don't know		88	3
	No response		99)

A3. What education have you received? (Read)

No education	0
Primary (4 grades)	1
Secondary (5-11 grades) (general or vocational school, or incomplete higher)	2
Higher	3
No response	99

A4. How many years did you study in total?

/____/ (please specify the number of years) No response: 99

A5. In what town or village were you born?

/_____/ (open question/please specify) Don't know: 88 No response: 99

A6. How long have you lived in Tbilisi?

Number of years: /____/ (*if less than one year, write down 0*) Don't know: 88 No response: 99

A6.1. Are you an IDP?

Yes – 1 No – 2 No response – 9

A7. Have you been involved in that business (commercial sex) in any other city? If yes, how long?

Yes	1
Never worked at any other place	2 (Go to A8)
No response:	99 (Go to A8)

A7.1. (Write down mentioned town/towns and ask for each of them) How long? (Write down weeks, months and years in the corresponding columns)

Town	Duration of work			Don't remember
	Week	Month	Year	99
1.				99
2.				99
3.				99
4.				99

A8. What's your nationality? (Mark just one option)

1
2
3
4
5
6
7
8
9
88
99

A9. How frequently did you drink during the last month? (*Interviewer, read the options, only one answer*) Tell me, did you drink everyday, once or twice a week, once or twice in two weeks, or once or twice a month?

Every day	1
At least, once a week	2
At least, twice a week	3
Once a month	4
Don't know	8
No response	9
I did not drink (Don't read)	88

A10. Some people have tasted various drugs. If you have done this, which one have you tried? (*Interviewer, read the list. For each drug use relevant option*).

A11. Ask for the mentioned drugs – Please tell me, how did you take this drug: did you inject, smoke, inhale, drink, breath in or how? (Don't help; multiple answer)

	A10	A11								
Mult. ans.	Drugs	Inhale	Inject	Swall ow	Breath in	Smo ke	Drin k	Other	Don't know	No respons e
1	Heroin _ (inhale, inject)	1	2	3	4	5	6	7	8	9
2	Opium _ (swallow, inject)	1	2	3	4	5	6	7	8	9
3	Poppy-seed _ (inject)	1	2	3	4	5	6	7	8	9
4	Subutex _ (drink, inject)	1	2	3	4	5	6	7	8	9
5	Inhalants (e.g. glue) _ (breath in)	1	2	3	4	5	6	7	8	9
6	Marijuana _ (smoke)	1	2	3	4	5	6	7	8	9
7	Ecstasy _ (drink)	1	2	3	4	5	6	7	8	9
8	Cocaine _ (inhale, inject)	1	2	3	4	5	6	7	8	9
9	Sedatives/hypnotics _ (drink, inject)	1	2	3	4	5	6	7	8	9
10	Other (Specify)	1	2	3	4	5	6	7	8	9
11	Has not tasted									
88	Don't know									
99	No response									

B. Marriage, Family and Work

B1. Have you ever been married?

Yes	1	Continue
No	2	Co to B3
No response	9	

B2. How old were you when you got married for the first time?

//	(please specify the age
Don't know:	88
No response:	99

B3. Are you now married or living with a permanent partner/lover/man? (*Interviewer: please define a permanent sexual partner:* A husband/lover/boyfriend/person, with whom a sex worker cohabitates or has regular sexual contact without exchange of money.) (Don't read out the options. Match response with any of the options below)

Currently married, having sex with husband	1	
Currently married, not having sex with a spouse. Having sex	2	
with another partner/lover/boyfriend/man		Continue
Currently married, not having sex with a husband or partner	3	
Married, have both a husband and a lover/ boyfriend/man	4	
Not married, but having sex with a partner/lover/man	5	
Not married, not having sex with a		Co to R5
partner/lover/boyfriend/man		
No response	9	
Other (Specify)		

B4. Does your spouse/lover/boyfriend have other partners/partner/lover/wife, or not?

1
2
8
9

B5. How old were you when first received money in exchange of sexual intercourse?

//	(please specify the age)
Don't know:	88
No response:	99

B6. Do you have another source of income besides this business (commercial sex work)?

Yes	1	Continue
No	2	Co to B8
No response	9	

B7. What is this other work? Do you have another job? Another? (Open ended question, write down the answers. May have several answers)

- 1. _____
- 3.

B8. Do you provide financial support to your children now? (Ask once more) Parents or other relatives?

	Yes	NO NO	
Yes, to children	1	2	Continue
Yes, to parents, other relatives	1	2	Continue
Yes, to children and to parents, other relatives	1	2	Continue
No response	9		Go to C1

B9. How many (financial) dependants do you have now in total?

// (please sp	becify the number of people)
Don't know:	88
No response	99

C. Sexual Life Record: Number and Type of Partners

C1. With your permission, now we'll ask you several questions about your partners. How old were you when you had the first sexual intercourse? (I mean not for money, but just regular sexual intercourse)

// (please specify	the age)
Don't know:	88
No response	99

C2. Over the last 7 days (a week) how many:

C2.1 Paying clients did you have? With how many partners did you have sex for money? (If the respondent fails to recall the exact number ask her to give you a rough number)

C2.2 Permanent clients did you have? Clients that you had sex but did not take money in this particular case? (If the respondent fails to recall the exact number ask her to give you a rough number)

C2.3 Permanent partners did you have - husband, lover, boyfriend? (If the respondent fails to recall the exact number ask her to give you a rough number).

Attention: you are asking about the number of partners and not number of intercourses!!! Place answers in the relevant columns below. Interviewer: If the respondent does not have permanent client or permanent partner, omit the corresponding sections below.

	C2.1 Number of paying clients	C2.2 Number of permanent clients	C2.3 Number of permanent partners
Number			
Don't know	88	88	88
No response	99	99	99

C3. Over the last 7 days (a week) how many different partners did you have? Include husband, lover, permanent client.

(Note: compare total number of partners in Q C2.1 and Q C2.2 and Q C2.3 to make sure that numbers match.) /____/ (Please specify the number of partners over the last 7 days)

Don't know: 88 No response: 99

D. Commercial Sex Work History: Paying Partners

D1. How many clients did you have during your last business day?

/____/ (Please specify the number of clients) Don't know: 88 No response: 99

D2. How much did your last client pay? (Please indicate the amount in Lari)

// Lari	
Don't know:	88
No response:	99

D3. Did you use condoms with your last client?

Yes	1	
No	2	
Don't know	8	Go to D5
No response	9	

D4. Who offered to use a condom? (Please read out the options, and circle one coded response.)

My initiative	1	
Partner's initiative	2	
Mutual initiative	3	Go to D6
Don't know	8	
No response	9	

D5. Why didn't you and your partner use the condom that time? (Don't read out the options. Circle the response)

Reasons	res	INO
1. Didn't have it	1	2
2. Too expensive	1	2
3. Partner refused	1	2
4. Don't like it	1	2

5. Take contraception	1	2
6. Didn't think needed	1	2
7. He looked healthy	1	2
8. Didn't think of it	1	2
9. Other <i>(Specify)</i>	1	2
Don't know	8	8
No response	9	9

D6. How frequently did you use condoms with all your clients over the last 30 days (1 month)? (Read out the options/one response)

Always - 1 Often - 2 Sometimes - 3 Never - 4 Don't know - 8 No response - 9

E. Commercial Sex Work History: Permanent Clients

E.1 How many permanent clients do you have? (*Define*: Permanent client is a client who often uses your sexual service)

/____/ (Please specify the number of clients) Don't know: 88 No response: 99

E2. Recall your very last permanent client with whom you had sexual intercourse. About how many times did you have a sexual intercourse with him over the last 30 days (1 month)?

	30 days
Did not have sexual intercourse	1
Up to 5	2
5-10	3
10-15	4
15 and more	5
Don't know/Don't remember	88
No response	99

E3. We spoke about your last client and about using condom with him. Tell me, whether he (your last client) was your permanent client or not?

- 1. He was permanent client
- 2. He was not permanent client (Go to E7)

E4. Last time when you had sexual intercourse with the permanent client, did you use condom?

Yes	1	
No	2	
Don't know	8	Go to E6
No response	9	

E5. Who offered to use a condom? (Circle one coded response.)

My initiative	1	
Client's initiative	2	
Mutual initiative	3	Go to E7
Don't know	8	
No response	9	

E6. Why didn't you and your permanent client use the condom that time? (Don't read out the options. Circle the response)

Reasons	Yes	No
1. Didn't have it	1	2
2. Too expensive	1	2
3. Partner refused	1	2

4. Don't like it	1	2
5. Take contraception	1	2
6. Didn't think needed	1	2
7. He looked healthy	1	2
8. Didn't think of it	1	2
9. Other <i>(specify)</i>	1	2
Don't know	8	8
No response	9	9

E7. How frequently did you use condoms with your permanent client(s) over the last 12 months (1 year)?

(Interviewer, read the options to the respondent)

Always - 1 Often - 2 Sometimes - 3 Never - 4 Don't know - 8 No response - 9

F. Commercial Sex Work History: Permanent Partners

F1. How many permanent partners do you have? (Define: Permanent partner is husband/lover/boyfriend/person, with whom the sex worker cohabitates or has regular sexual relations without exchange of money.)

/____/ (Please specify the number of partners) (*If the respondent does not have a permanent partner, go to section G*)

Don't know: 88 No response: 99

(If the respondent has more than one permanent partner, concentrate on the one with whom relationship is longer and more trustful.)

F2. About how many times did you have a sexual intercourse with your permanent partner over the last 30 days (1 month) and the last 12 months (1 year)? *(For the option of "12 months" read out the responses from the bottom "15 and more". If the respondent says "less" than read out the second from the bottom, and so forth.)*

	30 days	1 months
Did not have sexual intercourse	1	1
Up to 5	2	2
5-10	3	3
10-15	4	4
15 and more	5	5
Don't know/Don't remember	88	88
No response	99	99

F3. Last time when you had sexual intercourse with the permanent partner, did you use condom?

Yes	1	
No	2	
Don't know	8	Go to F5
No response	9	

F4. Who offered to use a condom? (Circle one coded response.)

My initiative	1	
Client's initiative	2	
Mutual initiative	3	Go to F6
Don't know	8	
No response	9	

F5. Why didn't you and your permanent partner use the condom that time? (Don't read out the options. Circle the response)

Reasons	Yes	No
1. Didn't have it	1	2
2. Too expensive	1	2
3. Partner refused	1	2

4. Don't like it	1	2
5. Take contraception	1	2
6. Didn't think needed	1	2
7. He looked healthy	1	2
8. Didn't think of it	1	2
9. I trusted him	1	2
10. Other <i>(specify)</i>	1	2
Don't know	8	8
No response	9	9

F6. How frequently did you use condoms with your permanent partner over the last 12 months (1 year)? (Interviewer, read the options to the respondent)

Always	1 (Go to section G)
Often	2 (Go to F7)
Sometimes	3 (Go to F7)
Never	4
Don't know	8 (Go to section G)
No response	9

F7. In which cases did you use condom with your permanent partner? (Don't read out. Match the responses with the coded answers. Use "Other" if needed.)

When my partner asked me to use it		1
When I doubted that I am infected		2
When I doubted that my partner is infected		3
When I had had abortion short time before		4
When I had menstruation (period)		5
Other	_ (Write down)	6
Don't know		88
No response		99

G. Condoms

Note: Ask G1 only if the condoms are not used. (Compare with D3, D6, E4, E7, F3 and F6. Respondent should not be using condoms in any of these questions. Otherwise, go to G2.)

G1. Have you everused condoms with any of your partners?

(Please note that the respondent may not have used a condom in the cases described in Parts D, E and F, but has used it in other periods)

Yes - 1 No - 2 Don't know - 8 No response - 9

G2. Do you know of a person or place where you can get, or buy condoms?

Yes	1	Continue
No	2	Co to C5
No response	9	

G3. Whom do you know or where can you get or buy condoms?

(Do not read out the options. Circle all the relevant coded responses) Where else?

	Yes	No
Shop	1	2
Drugstore	1	2
Market	1	2
"Tanadgoma"	1	2
Girls with whom you work	1	2
Other	1	2
No response	9	9

G4. Imagine you don't have a condom with you, how long would you need to get/buy from your work place to where it is sold/available?

Tell me, would you need . . . (Interviewer, read the options to the respondent. If she says "at any place" ask "How many minutes would you *still* need?")

y minutes would you shu need.	
Up to 5 minutes	1
5-15 minutes	2
15-30 minutes	3
30 minutes or more	4
More than a day	5
Don't know	8
No response	9

G5. How many condoms do you now have with you? (Check the number of condoms)

/____/ (Indicate the number of condoms) No response 99

G5a. Beside this, how many condoms do you have now at the place of your work?

/____/ (Indicate the number of condoms) No response 99

We try to find out, whether you face any kind of violence during your work. We would like to ask you about three types of violence: a) Forced sexual intercourses and rape; b) Physical violence/beating and other that does not imply sexual intercourse; c) Forced sexual intercourse through blackmailing, or some other kind of threatening.

Repeat the three types of violence. Tell the respondent: now we are speaking only about the physical violence.

G6. During last year have you ever been a victim of the physical violence? (Beating, smothering, etc.)

Yes	1	Continue
No	2	Co to C9
No response	9	

G7. Who made physical violence against you? (Don't read out. Match the responses with the coded responses.)

Client	1
Lover (boyfriend)	2
Husband	3
Pimp	4
Policeman	5
Stranger	6
Other	7
No response	9

<u>Tell the respondent: now we will speak only about forced sexual intercourse through blackmailing, or some other kind of threatening.</u> G8. During last year have you been forced to have sexual intercourse through blackmailing or threatening?

Yes	1	Continue
No	2	Co to C11
No response	9	

G9. Who forced you to have sexual intercourse through blackmailing or threatening? (Don't read out. Match the responses with the coded responses.)

Lover (boyfriend)2Husband3Pimp4Policeman5Stranger6Other7	Client	1
Husband3Pimp4Policeman5Stranger6Other7	Lover (boyfriend)	2
Pimp4Policeman5Stranger6Other7	Husband	3
Policeman5Stranger6Other7	Pimp	4
Stranger 6 Other 7	Policeman	5
Other 7	Stranger	6
	Other	7
No response 9	No response	9

Tell the respondent: now we will speak only about forced sexual intercourse and rape.

G10. During last year have you been the victim of rape?

Yes	1	Continue
No	2	Co to H1
No response	9	

G11. Who raped you? (Don't read out. Match the responses with the coded responses.)

Client	1
Lover (boyfriend)	2
Husband	3
Pimp	4
Policeman	5
Stranger	6
Other	7
No response	9

H. Sexually Transmitted Diseases

H1. Have you heard of diseases that are transmitted sexually?

Yes	1	Continue
No	2	Co to H3
No response	9	60 10 115

H2.1 Can you describe STD symptoms that are observed among women?

(Interviewer, don't read options. Circle the closest matching responses to the codes) Any other symptoms?

H2.2 Can you describe STD symptoms that are observed among men? (Interviewer, don't read options. Circle the closest matching responses to the codes) Any other symptoms?

	H2.1 Female Symptoms	H2.2 Male Symptoms
Stomach (abdominal) ache	1	1
Vaginal (genital) release	2	2
Burning while urinating	3	3
Vaginal (genital) ulcer	4	4
Swollen vulva or lower abdomen	5	5
Itching	6	6
	a)	a)
Other: (please specify)	b)	b)
	g)	g)
No response	99	99
Don't know	88	88

H4. Have you observed vaginal release during the last 12 months (1 year)?

- 1. Yes
- 2. No
- 8. Don't know
- 9. No response

H5. Have you observed vaginal ulcer/boil over the last 12 months (1 year)?

- 1. Yes
- 2. No
- 8. Don't know
- 9. No response

Note: Module I should be filled only for those respondents who have suffered vaginal release or ulcer/boil over the last 12 months. (Compare with H3 and H4). Otherwise go to Module J.

I. STD Treatment

I1. What did you do when you had vaginal release, or ulcer/boil last time? (Read out the options. Circle one for each question)

Questions	Yes	No	NR
1. Consulted or received a treatment at the state-owned health	1	2	9
clinic or hospital?			

2. Consulted or received a treatment at a private health clinic or	1	2	9
hospital?			
3. Consulted or received a treatment at a drugstore	1	2	9
4. Consulted or received a treatment from a traditional healer or a	1	2	9
wise man?			
5. Applied a self-treatment?	1	2	9
6. Told your sexual partner about your release or STD?	1	2	9
7. Stopped intercourses when the symptoms appeared?	1	2	9
8. Did you use the condoms during the symptom period?	1	2	9

J. Knowledge, Opinion, Attitude

J1. Have you heard of HIV or AIDS? (Please explain: HIV is a human immunodeficiency virus which causes AIDS. Make sure that the respondent understood what HIV is. You may use additional definitions too.)

Yes	1	
No	2	Co to K1
No response	9	

J2. Do you know any person who has been infected, ill with, or has died of AIDS?

Yes	1	Continue
No	2	
Don't know	8	Go to J4
No response	9	

J3. Do you have a close relative or friend who has been infected, ill with, or has died of AIDS?

Yes, a friend	1
Yes, a relative	2
No	3
Don't know	9

J4. Please give me your opinion regarding the following: (Please read out all options and circle the relevant answer.)

Assertions	res	INO	DK	INK
1. Can one reduce the HIV risk if one properly uses condoms during	1	2	8	9
every sexual contact?				
2. Can one get HIV as a result of a mosquito's bite?	1	2	8	9
3. Do you believe that one may protect oneself from HIV/AIDS by	1	2	8	9
having one uninfected and reliable sexual partner?				
4. Do you believe that one can protect oneself from HIV/AIDS by	1	2	8	9
keeping away from (avoiding) sexual contact?				
5. Do you believe that one can get HIV/AIDS by taking food or	1	2	8	9
drink that contains someone else's saliva?				
6. Do you believe that one may be infected with HIV/AIDS by	1	2	8	9
using a needle/syringe already used by someone else?				
7. Do you believe that a person who looks healthy can be infected	1	2	8	9
with HIV, which causes AIDS?				

J5. Do you believe that an HIV/AIDS-infected pregnant woman can transfer virus to fetus?

2	
8	Go to J7
9	
	2 8 9

J6. What do you believe a pregnant woman might do reduce the risk of transferring the infection to fetus?

(Don't read out the options to the respondent. Multiple answers are acceptable)

Take medication (antiretrovirals))	1
Other	please specify	2
Don't know		8
No response		9

J7. Can a mother transfer the HIV/AIDS to her baby through breastfeeding?

Yes	1
No	2
Don't know	8
No response	9

J8. Is it possible for Female Sex Workers take confidential HIV/AIDS test to see if one is infected? "Confidential" means that nobody will know about the test results without one's permission.

Yes No Don't know No response

J9. I don't want to know about the test results but have you ever taken an HIV test?

Yes	1	
No	2	
Don't know	8	Go to J14
No response	9	

J10. Was it your initiative to take the HIV/AIDS test or you had to? It was voluntary 1

2 9

It was voluntary	
I had to	
No response	

J11. Don't tell me the test result, but do you know it?

1 2

8

9

Yes	1
No	2
No response	9

J12. If yes, did you tell anybody your test result?

Yes	1
No	2 (Go to J14)
No response	3
No response	9

J13. If you told anybody your test result, please tell me, whom did you tell? (Mark all mentioned responses)

Client/clients	1
Permanent client/clients	2
Permanent partner/partners	3
Colleague sex workers	4
Family members	5
Relatives	6
Friends	7
Nobody	8
Other	9
No response	99

J14. If you were told that you are HIV positive, whom would you tell about this?

Nobody	Yes		No
Client	1		2
Permanent client	1		2
Permanent partner	1		2
Family members	1		2
Relative	1		2
Colleague	1		2
Friend	1		2
Other (sp	ecify) 1		2
Don't know		88	
No response		99	

J16. When did you take the last HIV test?

Some time last year - 1 Between 1-2 years ago - 2 Between 2-4 years ago - 3 More than 4 years ago - 4 Don't know - 8 No response - 9

J16. Now please tell me: (Read out the list and circle one answer for each question)

	Yes	No	DK	NR
1. Would you like to have meal with a person who is diseased with HIV or AIDS?	1	2	8	9
2. If your relative man were infected with HIV would you like to take care of him	1	2	8	9
at your place?				
3. If a student is infected with HIV, but not diseased may he be permitted to	1	2	8	9
continue studying?				
4. If your relative woman were infected with HIV would you like to take care of	1	2	8	9
her at your place?				
5. If a teacher is infected, but not diseased with HIV may he be permitted to	1	2	8	9
continue teaching at school?				
6. If acquainted with you food salesman is infected with HIV, will you buy food	1	2	8	9
from him/her?				
7. If the member of your family were infected with HIV would you like it to keep	1	2	8	9
this in secret?				

K. Impact of the Infection Source (Optional)

K1. Could remember, where from do you get information about STI/HIV? (Don't read) Could you remember some other source of information? (Multiple answer)

TV/Radio	1
Newspapers	2
Friends	3
Clients	4
Family members	5
Social workers	6
Other	7
No response	9
I have never heard anything about STI/HIV	99 (Go to section

K2. Don't you remember the ways of protecting from STD/HIV? I have in mind those means that provide the protection from HIV. What else do you recall? Which else? *(Don't prompt, circle all the answers given by the respondent)*

L)

ompt, enere un une unsweis given by une respondent,	
Condom use	1
Avoiding sexual contacts	2
Contact with one devoted partner	3
Safe forms of sexual contact	
(masturbation, non-penetrative contact)	4
Don't know	8
No respond	9
-	

(Define: Non-penetrative contact is a sexual contact when the male penis does not penetrate into the female body. Masturbation is getting sexual pleasure using your own hands.)

K3. What do you think can a person get STD or AIDS/HIV if she/he has the blood group A?

Yes	1
No	2
Don't know	8
No response	9

L. Media Communication

L1. Within the last 4 weeks how frequently did you listen to radio?

(Interviewer, read the options to the respondent. One response is quite acceptable. Mark the responses in the table below.)

L2. Within the last 4 weeks how frequently did you watch TV?

(Interviewer, read the options to the respondent. One response is quite acceptable. Mark the responses in the table below.)

	L1. Radio	L2. TV
Everyday	1	1
No less than once a week	2	2
Less than once a week	3	3
Never listened within the last 4 weeks	4	4
Don't know	8	8
No response	9	9

Q3. You have been very helpful. After generalization and statistical analysis of the present study our organization will plan projects that will be beneficial for all. If in several months I need to take another interview from you, would you make yourself available?

Yes	1
No	2
Don't know (we'll see)	8

Interviewer, thank the respondent for cooperation and say good-bye. After the interview make sure you have taken down the respondent's identification data so that the same person is used in the following panels of the study.

Q4 During the interview the respondent was:

- 1. Interested
- 2. Calm
- 3. Indifferent
- 4. Agitated
- 5. Uninterested

Time when interview was concluded______ The questionnaire is kept till completion of the project.

Q5. Quality control on the interview was carried out by	
Position	

Organization_

Quality control group member has used (completed) quality control card______Signature______