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

Report on the Behavioral and Biomarker Surveillance Survey for the SHIP Project

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

August 2003

Save the Children

Infectious Diseases, AIDS and Clinical Immunology Research Center

TANADGOMA

Institute for Polling & Marketing

Funded by:
USAID
The US Agency for International Development

The STI/HIV Prevention (SHIP) Project is being implemented in partnership with Program for Appropriate Technology in Health (PATH), Tanadgoma, and Bemoni Public Union, with close collaboration with the Infectious Diseases, AIDS and Clinical Immunology Research Center, the Research Institute on Addiction, the Association of Dermatovenerologists of Georgia, and the Republican Center of Health Services for Mother and Child in Batumi.

This study was funded by the United States Agency for International Development (USAID) through the STI/HIV Prevention (SHIP) Project implemented by Save the Children (Cooperative Agreement 114-A-00-02-00095-00). The opinions expressed in this report do not necessarily reflect the views of USAID.

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Acknowledgments

This surveillance survey report is the culmination of contributions made by numerous individuals, organizations and institutions, starting from its inception and throughout the entire process of planning, fieldwork, data analysis, writing and editing. Each of their contributions has been invaluable. Furthermore, the United States Agency for International Development (USAID) has provided the necessary funds that allowed this important study to take place.

The early phases of planning the survey relied heavily upon the professional work and insightful knowledge that Tanadgoma–Center for Information and Counseling on Reproductive Health, and the AIDS Center, both collaborating with the STI/HIV Prevention (SHIP) Project, had regarding female sex workers (FSWs) in Tbilisi. Tanadgoma's work has especially played a leading role for the foundation of this study. Building upon this foundation, Dr. Gina Dallabetta, from Family Health International, with assistance from Gocha Tskitishvili, Director for the Institute of Polling & Marketing (IPM), lead the SHIP Project through a process that allowed a variety of insights about FSWs to help inform the research design and protocols eventually used. The advice and guidance provided by Dr. Dallabetta has not only been a great learning experience for all involved, but has been crucial in establishing the systematic methodology finally used that was both non-coercive and anonymous.

One of the most demanding aspects of the project was the fieldwork. Working on a minimal budget, all the staff of Tanadgoma and the AIDS Center, with the assistance of experienced interviewers from IPM, contributed enormous amounts of time in preparation, interviewing, taking and testing blood specimens. And, Save the Children's drivers played a vital role in transporting the blood specimens for testing as needed. Moreover, all persons involved in these activities did it with compassion and concern for the protecting the rights of the FSWs. To help with aspects of quality control and improvement in the data collection process, Rusudan Telia, Nadio Ravadze, Maya Tsiramua and May Robakize were hired as independent consultants. Their recommendations will be extremely beneficial for repeated surveys. Irakli Sakandelidze assisted with the editing and adaptation of the FHI questionnaires. IPM, besides assisting with interviewing, also created the behavioral surveillance database.

If all were told, the number of authors on the report would fill one page. Many people have read, and reread, drafts of the report and made worthy contributions. When the time came for final revisions, Charlie Kaften, Save the Children's Field Office Director, devoted his time and effort to make the final editorial review. Nonetheless, any flaws that remain in the report are solely of the authors mentioned.

Translating any document, especially a report written with technical health and statistical expressions, is challenging. Nonetheless, Nino Tsereteli has provided a high-quality version of the report in Georgian; this will make the report accessible to a wide Georgian audience interested in understanding how to improve services and treatment for female sex workers.

Table of Contents

List of Figures

List of Tables

Acronyms

AIDS - Acquired Immune Deficiency Syndrome
AIDS Center - Infectious Diseases, AIDS & Clinical Immunology Research Center
BBPS - Behavioral and Biomarker Prevalence Survey
BSS - Behavioral Surveillance Survey
CT - *Chlamydia trachomatis*
ELISA - Enzyme Linked Immunosorbant Assay
FSW - Female Sex Worker
GEL - Georgian Lari (exchange rate of 2.2 to 1USD at time of report)
GN - *Neisseria gonorrhoeae*
HIV - Human Immunodeficiency Virus
IDP - Internally Displaced Person
IDUs - Injection Drug Users
IgG - Immunoglobulin G
IPM - Institute for Polling & Marketing
MTCT - Mother to Child Transmission
MSM - Men who have Sex with Men
NGO - Non-Government 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
TP - *Treponema pallidum*
TPHA - *Treponema pallidum* Hemaggultination Assay
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.

High-Risk Behavior: Any behavior that puts an individual or individuals at increased risk of contracting HIV/STI or transmitting HIV/STI to another individual (e.g., having multiple sex partners without using condoms consistently; sharing used non-sterile needles among IDUs).

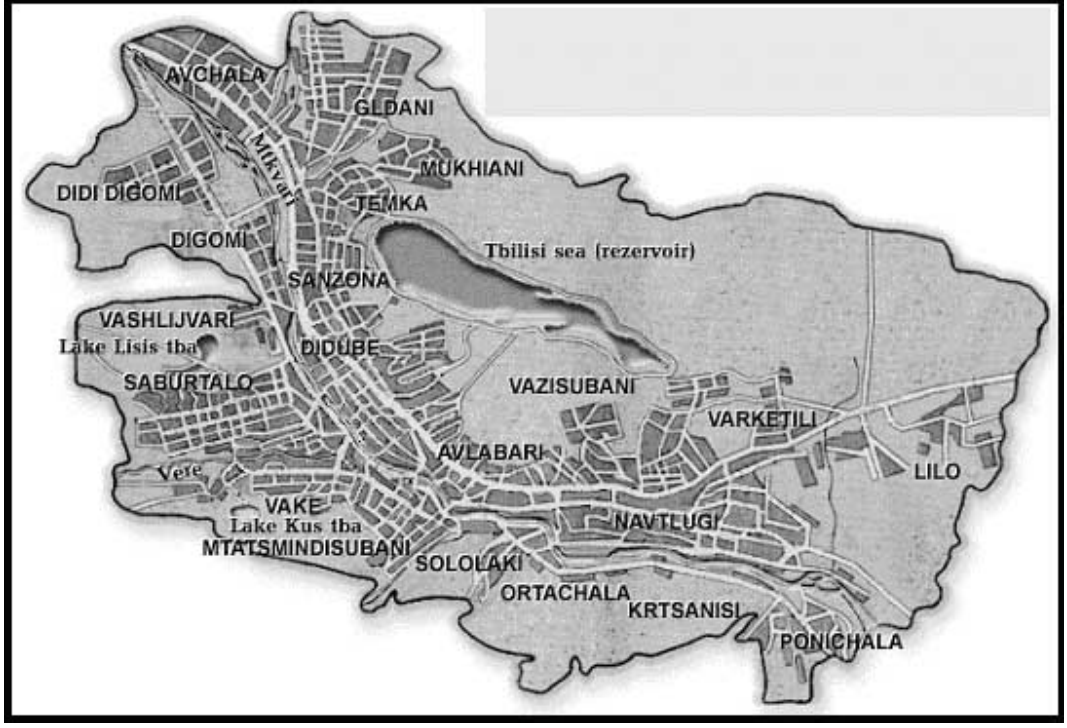
Regular sexual partner: A spouse/boyfriend/person with whom an FSW cohabitates with and has established regular sexual contacts without exchange of money.

Separated: A person who does not cohabitate and has broken relationship with their 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 throughout Tbilisi.

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

Figure 2: Capital of Georgia, Tbilisi; population est. - 1.3 million.



Executive summary

This report is the first behavioral and biomarker prevalence surveillance (BBPS) conducted in Georgia among female sex workers (FSWs). It will serve as a baseline measurement of different risk behaviors of FSWs for Save the Children's STI/HIV Prevention (SHIP) Project and other HIV/AIDS prevention activities in Georgia.

In October 2002, using a "mapping" process of identifying the numbers, street sites and working hours of street-based FSWs in Tbilisi, a total of 160 street-based FSWs agreed to participate and were interviewed. Of the 160 FSWs, 2 declared themselves transvestites; thus, for purposes of uniformity, only females were included in the analysis, making a final number of 158 FSWs.

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 STI and HIV/AIDS and use of health services. After the interview, each respondent was asked if they would provide both a urine and blood specimen for an anonymous-linked test for sexually transmitted infections (STIs) and HIV. Of the 158 FSWs 155 provided a urine specimen; the prevalence rates 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+.

On average, FSWs are 27.1 years of age (a median of 26.0 years of age). The largest percentage (32.3%) is 19-24 years of age, with the next largest percentages (25.9%) 25-30 years of age, and 23.4% being 31-39 years of age. Slightly more than 10% (or 18) of the respondents were 18 years of age or younger. The smallest percentage were 40 years of age or older (10.0%).

The FSWs reported to have attended school for, on average, 10.9 years. The majority of them (76.0%) have completed secondary or vocational level education, with 13.0% having earned a university degree.

A majority (74.1%) are divorced or separated. Almost one out of every five (17.7%) has never been married and only 8.2% are currently married. The overwhelming majority (85.4%) of FSWs have dependents (children, parents, grandparents) that they financially support. Moreover, the percentage of FSWs that financially support dependents increases with age.

Overall, the average age at which FSWs first exchanged sex for money was at 24.2 years of age. On average, these FSWs have been involved in commercial sex for 3.1 years. It appears that they have not been engaged in sex work for a long period of time; the oldest age group has been involved in commercial sex for 4.6 years. One FSW has been involved for 26 years. A small percentage (3.1%) was involved in commercial sex prior to the collapse of the Soviet Union twelve years ago. Only 9.5% of FSWs have other sources of income. Of those that did, it was generally from parental support or petty trade.

[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 Dallabeta, (in press), "STI Control Interventions For and With Sex Workers," in Reproductive Health Matters.

The fees received by the FSWs for commercial sex varied from 10 GEL to 215 GEL, for an average of 34.8 GEL per sex encounter. The youngest group received, on average, 47 GEL, which is double the average received by the oldest group (20.9 GEL). Taking the average number of clients per week (8) and the average amount made per client (35 GEL), on average FSWs earn 280 GEL per week, or 1,120 GEL per month (approximately $500USD). However, this amount does not include what they must pay for protection to a pimp, a policeman or others who may extract fees. Nevertheless, even after these payments, FSWs would most likely earn more per month than the average household in Georgia (213 GEL)[2] or the official poverty line (107 GEL per person or 212.5 GEL for family of four).[3]

Only 1.3% reported that they have never used a condom. The largest percentage of FSWs who had never used a condom was for the youngest FSWs, under 19 years of age. The overwhelming majority (94.9%) used a condom with their last client. This percentage was similar for all age groups. Almost three-quarters (74.3%) of FSWs reported that the use of the condom was their initiative, with 24.3% stating it was a mutual decision between them and their client.

When asked if they had experienced either sexual or physical violence in the last year, 42.4% (or 67) reported they had. The highest percentage (50%) of FSWs that experience sexual or physical violence is the youngest age group, those 18 years of age or less.

Almost all FWS (99.4%) were aware of sexually transmitted infections (STIs). A total of 112 (70.9%) had at least one STI symptom (abnormal vaginal discharge and/or vulvae ulcer/boil) during the last 12 months. Of the 112 FSWs with an STI symptom, 90.2% received some treatment for these infections, 9.8% (or 11) did not.

About one-half (51.6%) of FSWs have been tested for HIV, and the majority (97.4%) has received the results. When asked if the HIV test was voluntary or not, 85% said that it was voluntary. The majority of FSWs were tested for HIV within the last year (74.4%).

Conclusions

The BBPS surveillance survey was conducted as an activity within SC's SHIP Project, funded by USAID. It was conducted in order to establish a rigorous and replicable methodological design that would be able to 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 survey was conducted to obtain critical data and information for the following:

- Baseline information on indicators being promoted by UNAIDS in order to monitor the success of STI/HIV prevention programs;
- Additional information to supplement other formative assessments to determine those risk behaviors where prevention interventions should be directed.

[2] The Status of Households in Georgia-2002.November 2002. Dershem and Sakandelidze, Save the Children, Tbilisi, Georgia.

[3] The Official Poverty Lines are for 3rd Quarter, 2002. Georgia Economic Trends, 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 addition, many other positive outcomes were observed in this surveillance survey. 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 as part of their participation, indicating that the FSWs likely understand the risk of STIs. The survey also increased awareness among the FSWs regarding services from NGOs and the Healthy Cabinet.

The second positive outcome was that NGOs and government research institutions forged new working relationships that will allow for stronger, more synergistic prevention programming in the future. Finally, the parties involved in this survey increased their data collections skills.

As for the FSWs, the vast majority of FSWs (91%) reports that sex work is their sole source of income and a similarly high percentage report that they have dependents that they support (85%). A high percentage of FSWs (94.9%) reported using a condom with their last paying client and 71.6% reported consistent condom use in the last month with paying clients. This data is consistent with the high reported condom use among IDUs who reported having had sex with an FSW (83.5% at last sexual contact). The high reported condom use rate of FSWs with paying clients is in contrast to low reported condom use rates with non-paying clients/regular partners (17.6% at last sexual encounter and 6.8% consistently over the previous month).

The reported high rate of condom use with paying clients appears to contradict the high prevalence of STIs found in the survey group. It is possible that they stated they use condoms when they did not to please the interviewers or because they know that they should. This is known as "social desirability bias." The STI risk may come from the nonpaying or regular partners of these women, or may be related to the high level of sexual violence experienced by them (about 33.5%). The high rates might also be related to lack of access to effective STI services. In the previous year, these women sought treatment for STI-related symptoms at state clinics/hospitals (57%), treated themselves (50%), and/or got treatment from a pharmacy (40.5%). Only 13% got treatment form private clinics or hospitals.

The FSWs are aware of HIV testing services in the community and about half have been tested and received their results. Only 2 (1.3%) of the 158 FSWs interviewed reported injecting drugs. In other countries, drug-injecting FSWs can act as a "bridge" for HIV to the general population.

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 boyfriends and trusted 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 non-paying and regular partners of FSWs remains a challenge. These relationships are of unknown stability and fidelity. Trying to

reach these partners and designing appropriate interventions is necessary.

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

There is clear epidemiologic and biologic 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 this survey. 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.[4] 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 care 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. About one-half of the FSWs in this survey 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

Based on the informal ethnography of sex work in Tbilisi, in addition to street-based sex work, there is facility-based sex work (saunas, bath-houses and hotels) and cell phone-based sex work. This surveillance only surveyed street-based sex workers.[5] 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 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.

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.

Reducing the risk environment interventions

Multiple strategies are necessary to address sexual risk in commercial sex settings. These include both individual behavior change interventions, as outlined above, and

[4] "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.
[5] 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.

environmental interventions addressing risk at the structural level.[6] 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 – should also be considered.

Recommendations

1. FSWs in this study appear to have high condom use rates with paying clients, low use with non-paying/regular clients, high levels of treatable STIs, frequent health seeking behavior at ineffective STI services (pharmacies and self-treatment), and high levels of reported violence. 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 distribution 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. Sexual health services with an orientation for sex work 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 general educational issues appropriate for the general populations. Specific, explicit HIV prevention messages and materials for FSWs and their clients are best done at the interpersonal level through outreach workers and peer educators rather than through mass media outlets.

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 and efforts to prevent children from engaging in such activities.

[6] Steen, Richard and Gina Dallabeta, (in press), "STI Control Interventions For and With Sex Workers," in Reproductive Health Matters.

6. Voluntary HIV testing and counseling, 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 though sites that provide other HIV prevention and sexual health services to FSWs.

7. The apprehension of FSWs for forced testing and treatment by the police is not an effective strategy. In the short-term, public health officials and NGOs should negotiate with local authorities for a more pragmatic and flexible application of law and regulations and, in the long-term, address these at a higher level.

8. Organizations working with gender-based violence should expand their services to include FSWs as a target group.

9. Interventions for FSWs must be extended beyond Tbilisi. Based on information from the Public Health Officials in Batumi, for example, commercial sex is common there. High-risk sites should be identified and prevention interventions begun. Typical sites include urban areas, ports and commercial transit areas, cross-boarder areas, and military sites where large numbers of workers without their families reside.

10. In a recent survey among youth, 84% of males 15-17 years of age thought is was "ok" to start their sexual life before marriage with an FSW.[7] Moreover, 74% reported that they had had sexual intercourse. In light of these findings, organizations working with youth should promote healthy lifestyle curriculums 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.

11. Non-coercive, anonymous, ethical and systematic surveillance of FSWs (and other high risk groups), both behavioral and of selected biologic markers, should be conducted throughout Georgia and repeated on a regular basis to monitor whether STI/HIV prevention and reduction interventions are working.

[7] Youth Reproductive Health Survey, UNFPA, 2002, Tbilisi, Georgia.

Summary of Biomarker & Behavioral Indicators for FSWs in Tbilisi

Indicator	Prevalence
Biomarkers	
Neisseria gonorrhoeae	17.4% (27/155)
Chlamydia trachomatis	25.8% (40/155)
Reactive Syphilis serology (RPR, TPHA with ELISA confirmation)	28.8% (44/153)
Percentage with no STI	44.7% (68/152)
Percentage with 1 STI	40.1% (61/152)
Percentage with 2 or more STIs	15.2% (23/152)
HIV (ELISA with Western Blot confirmation)	0.0% (0/153)
Demographic Characteristics	
Median age	26 yrs
Level of education	76.0% (secondary)
Marital status	74.1% (divorced)
Sole source of income	90.5% (143/158)
Have financial dependents	85.4% (135/158)
Average # of dependents for FSWs with dependents	3.9 (135)
Alcohol & Drug Use	
Consume alcohol at least once a week	42.4% (67/158)
Ever taken "pills"	1.9% (3/158)
Ever used inhalants	1.9% (3/158)
Ever injected drugs (last year)	1.3% (2/158)
Study Population Characteristics	
Median age at 1st sexual contact	16 yrs
Median age 1st received money in exchange for sex	23 yrs
Mean years working as a sex worker	3 yrs (range yrs:<1 to 26)
Sexual risk behavior	
Has non-paying/regular partner	57.6% (91/158)
Condom use during last sexual intercourse with non-paying/regular partner	17.6% (16/91)
Consistent (always) condom use with non-paying/regular partner over last month	6.8% (5/73)
Condom use with last client	94.9% (156/158)
Consistent (always) condom use with clients over last month	71.6% (111/155)
Experienced threats or physical violence in the past year	8.9% (14/158)
Sexual contact against will in the past year	15.8% (25/158)
Both sexual contact against will and threats or physical violence in the past year	17.7% (28/158)
Condoms	
Place where condoms are obtained	87.0% (pharmacy)
Less than 5 minutes is needed to obtain a condom	75%
If condom not used with last client, why?	50% (client refused)
STI and HIV knowledge, experience and practices	
Do not know any STI symptom for women	8.1% (12/149)
Had abnormal vaginal discharge in last 12 months	70.3% (109/155)
Had vaginal ulcer/boil in last 12 months	11.0% (17/154)
Places sought treatment:	
State clinic/hospital	56.8% (62/111)
Self-treatment	50.0% (36/111)
Aware of HIV/AIDS	98.1% (155/158)
Know person with HIV/AIDS	8.4% (13/154)
Received information about HIV/AIDS	93.0% (147/158)
Main sources of HIV/AIDS information:	
Television	41.5% (61/147)
Social workers	36.7% (53/147)
Correctly identify six means of transmitting HIV	0.6% (1/155)
Voluntary Counseling and Testing	
Voluntary HIV testing in the community	80.6% (125/155)
Had an HIV test	51.6% (80/155)
Received HIV result	97.4% (76/78)

Introduction

Georgia has an estimated population of 4.4 million people that live 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 cofactor in HIV transmission, and the same risk behaviors perpetuate both infections. STIs and also have severe reproductive consequences, in addition to increasing HIV transmission.

Experts from the World Health Organization (WHO) 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 a concentrated epidemic among high-risk groups that includes IDUs and FSWs. The first HIV diagnosis in Georgia was made in 1989. As of April 2003, a total of 413 HIV cases have been registered. The estimated number of persons living with HIV in Georgia may be closer to 2,000 persons.[8] However, STI/HIV data suffer from weak screening and reporting protocols, which are likely to have resulted in widespread under-reporting. Moreover, reports of recent increases in the rates of STIs indicates a future potential for HIV to spread more rapidly among a wider population through sexual contact.

IDUs account for 70% of the registered HIV cases, heterosexual contacts for 24% (1/3 of these heterosexual contacts were with known IDUs); homosexual contacts for 4%, and 2% were blood recipients. In the opinion of some local experts, the actual estimations of drug abusers (non-injection and injection) in Georgia are between 150,000 and 250,000 (or about the 3.4% to 5.7% of total population). Therefore, given the present conditions, a future HIV epidemic among IDUs, particularly among those in prison, cannot be precluded, given the high prevalence of needle sharing and unprotected sex among IDUs.

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.[9] In

[8] Statistical Report for 2002, Infectious Diseases, AIDS and Clinical Immunology Research Center, Tbilisi, Georgia.
[9] Situation Analysis on HIV/AIDS in Georgia, Georgian AIDS & Clinical Immunology Research Center, 2001.

the same report, 51.5% of FSWs indicated they used condoms with clients on a regular basis.[10]

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 of prevention to the further spread of the STI/HIV epidemic is yet to be established in Georgia, as well as the Caucasus region as a whole.

Methodology

A cross sectional behavioral and biomarker prevalence survey (BBPS) was conducted by the STI/HIV Prevention (SHIP) Project among street-based FSWs in November 2002 in Tbilisi, Georgia. The study was approved by, and 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.

Ethical Issues

The survey investigators are cognizant of the fact that the target groups for this study were at some risk for social harm, should they be identified as part of the target groups. The survey was designed to maximally protect the participants while balanced with individual and community benefits. The ethical issues that have been taken into consideration are:

- Respondent participation was through voluntary consent, with participants free to withdraw at any time. Participants were informed that refusal or withdrawal would not affect services they would normally receive.
- No names were recorded. All documentation is anonymous-linked, identified by a study number that was known only by the participant.
- All staff involved in the study were trained in discussing sensitive issues and protecting participants' confidentiality and human rights.
- All individuals identified with a curable sexually transmitted infection were offered free treatment.

[10] Georgian AIDS & Clinical Immunology Research Center, 2001: pg. 42 (unpublished).

- Recruitment of participants was done initially by NGOs already working with the population or by the target population themselves.

Based on previous fieldwork by NGOs, there appear to be 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 "status" among FSWs. Of all these types, 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 of no pimp;
- Likely to be at higher risk of STI/HIV, due to having a greater number clients; and
- Least likely to be able to afford testing and treatment.

To recruit street-based FSWs in Tbilisi, a process of "mapping" was conducted in October 2002 by Tanadgoma (TG), in collaboration with a local research institute (the Institute for Polling & Marketing - IPM). Mapping was necessary to identify the section of the city, street sites, approximate numbers, and working hours in Tbilisi.

Mapping

The mapping exercise involved the use of a detailed street map of Tbilisi. TG, in consultation with IPM, divided the city into 30 grid sections (see Figure 3 below). 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 day (14:00 to 17:00) and once at night (21:00 to 00:00).

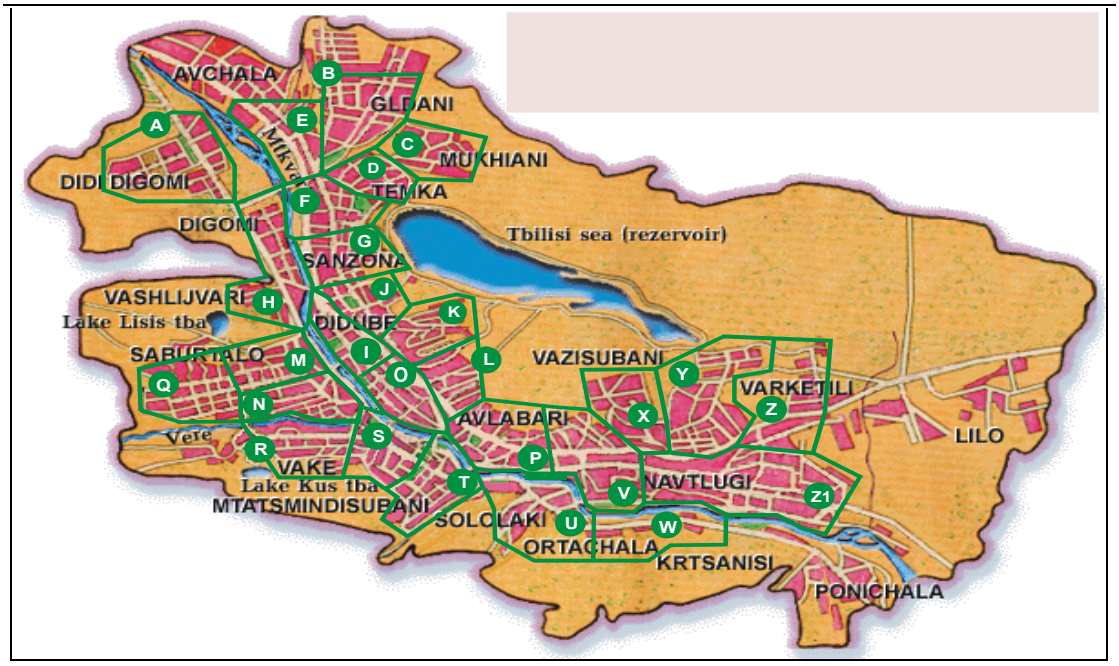
In 14 sections no street-based FSWs were sited. In the remaining 16 sections, 75 locations were identified, and a total of 174 FSWs were observed. Of the 75 locations, 23 were identified as "day" sites with 53 FSWs, and 48 were identified as "night" sites with 123 FSWs. In 4 sites FSWs were seen working both during the day and night. Based upon this mapping exercise, a decision was made to recruit 160 FSWs to participate in the survey.

Recruitment consisted of a driver and a TG social worker going to each section informing the FSWs about the purpose of the BBPS survey. Each FSW was offered a coupon allowing her to free testing and treatment, if she were found to have a STI, as an incentive for her to participate in the study.[11] If the FWS 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. The STIs for which screening was conducted were syphilis, chlamydial 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

[11] The offer of a coupon for free testing and treatment as an incentive to FSWs was the outcome of several focus group sessions with FSWs in which they identified the preference for this incentive.

weeks to find out the results of their test. After the interview, the FSWs were driven back to the site were they were recruited.

Figure 3: Thirty Sections of Tbilisi Used for Observation and Mapping of FSWs.



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 of the test was positive, the FSW was invited to TG, and the results were presented along with post-counseling. In addition, 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. The one male sex worker who initially tested positive for HIV received his results in TG's office, and after post-counseling he was referred to the AIDS Center for confidential symptomatic treatment. However, he did not go to the AIDS Center for an HIV confirmatory test.

Study Instrument

The survey instrument 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 review, pre-testing and adjusting to the Georgian context. Next, 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 in case some FSWs were Russian speaking.

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

Recruitment of Study Participants and Interviewing

As mentioned earlier, in 16 of the 30 sections of the city, a total of 174 FSWs were observed in 75 locations (streets). A team of two staff from TG went to all 75 locations, beginning with the most distant locations, during the day (if they were a "day" site) and at night (if they were a "night" site).

1. The staff of TG (4 social workers) contacted 184 street-based FSWs from 4 to 28 November 2002.
2. A total of 158 street-based FSWs and two male transvestites were recruited (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. Sampling ended when the minimum 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.
6. A total of 155 urine samples were collected for testing on GN and CT, and 153 blood samples were collected for testing on syphilis and HIV.

A total of 158 FSWs out of 182 contacted by TG staff agreed to participate in the survey. They were brought to TG's office for interviewing, blood drawing and urine collection. A total of 26 FSWs (or 14.1%) contacted refused to participate in the survey. The main body of the report will focus on the 158 FSWs and will not include the two male transvestites; however, they are discussed in the results section.

Biomarker Testing

The biomarker component of the survey involved the analysis of blood specimens at the Laboratories of Serology and Virology at 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 (Genescreen Plus HIV Ag-AB, Bio-rad) test, the sample was retested two more times using another kit of ELISA. Samples were considered HIV antibody positive if they were reactive in 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 for HIV.

Syphilis testing:

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

Neisseria gonorrhoeae and Chlamydia trachmatis

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

Data Entry and Statistical Analysis

Data entry was conducted by IPM using SPSS (version 11.0). Data analysis was conducted by Keti Stvilia from the AIDS Center, using the same software. Percentages, means and medians were obtained to assess prevalence of HIV and other STIs and related risk factors. Bi-variate relationships between age groups and other variables studied within the survey, as well as the relationship between condom use and predictor variables, were examined using chi-square test and Fischer's exact test.

Findings

Portrait of a Female Sex Worker – Nestan

In Tbilisi, there are many FSWs 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 plurality, 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.

Nestan is 26 years old and has been a sex worker for a little more than three 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 two children and her mother, who helps take care of the children. 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 ever 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 three years. Over the last week she has had eight clients. She charges 35 GEL, which means over the last week she has made about 280 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 hides from her family and friends back in her town how she actually earns money.) Nevertheless, Nestan is still upset that she had to pay some money to the policeman not to harass her or force her to go be tested for syphilis.

To protect herself, most of the time she requires her clients to wear a condom. Those few times her clients do not wear a condom it is because the clients threaten to beat her. Nestan and other sex workers she knows are occasionally beaten by clients and police. 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 with abnormal vaginal discharges. 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 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. Because of her concern, she has taken an HIV test, and she was extremely happy when she was told it was negative.

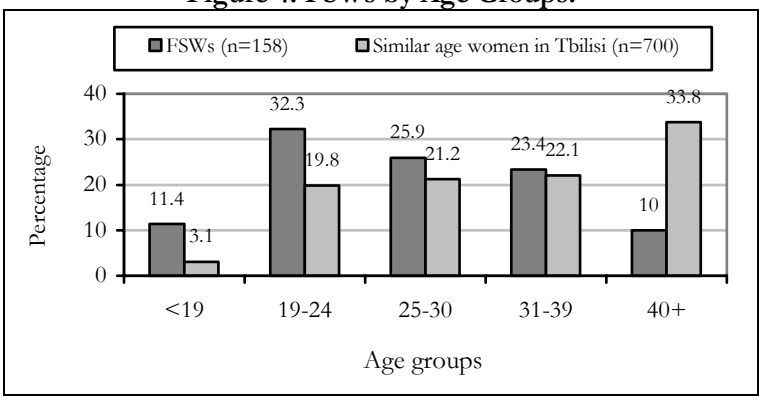
Nestan has a boyfriend whom she loves, and he does not mind her doing this type of work, since she must support her family. To show her love and trust of him, she does not insist on him using a condom. However, she is never sure that he does not have other sexual partners. Sometimes she wonders if her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

On weekends, she will often drink with her friends, but she stays away from drugs and pills. Everyday she hopes the situation will change, but until then she tries to keep herself healthy enough so, when the economic situation in Tbilisi does change, she can get another job that pays enough to support her family, and she can move back to her hometown.

Socio-demographic characteristics

On average, FSWs are 27.1 years of age (a median of 26.0 years of age), as shown in Table 3. The largest percentage (32.3%) is 19-24 years of age, with the next largest percentages (25.9%) for those 25-30 years of age and (23.4%) for those 31-39 years of age. Slightly more than 10% (or 18) of the interviewees were 18 years of age or younger. The smallest percentage of FSWs were 40 years of age or older (10.0%).

Figure 4: FSWs by Age Groups.



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 BBPS. Figure 4 shows that FSWs tend to be disproportionately under 25 years of age compared to females in the general population, especially in the 19-24 age group.

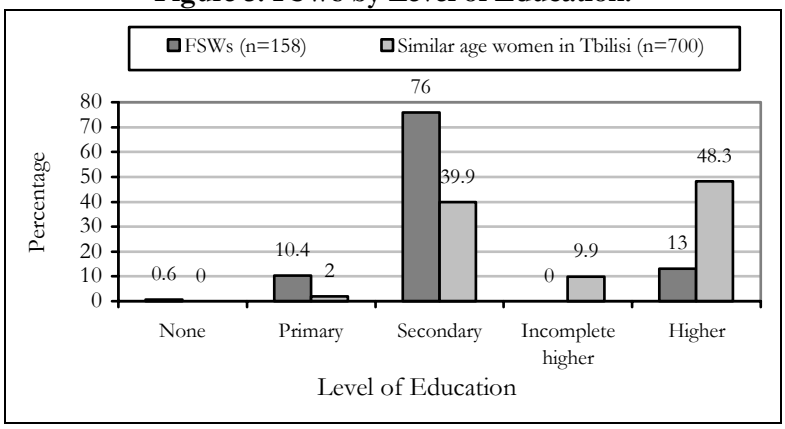
Ethnically, the majority of FSWs is Georgian (79.7%), with only small percentages being Russian (6.3%), Ukrainian (2.5%), Armenian (2.5%), Ossetian (1.3%) or "other" (6.4%).

In Georgia there are approximately 250,000 internally displaced persons (IDP) 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. When asked, 3.8% of FSWs reported that they were an IDP. Therefore, there does not appear to be a disproportionate percentage of female IDPs who are FSWs.

All FSWs (100%) currently live in Tbilisi and have lived here, on average, for 13 years. A small percentage (9.5%) of them have been previously engaged in commercial sex in another city.

FSWs have attended schooling for, on average, 10.9 years. The majority of them (76.0%) have completed secondary or vocational level education, with 13.0% having earned a university degree (Figure 5). Only 1 FSW (0.6%) had no formal education. In the same representative survey conducted in Tbilisi in February 2002 mentioned above, 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% 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%, respectively).

Figure 5: FSWs by Level of Education.



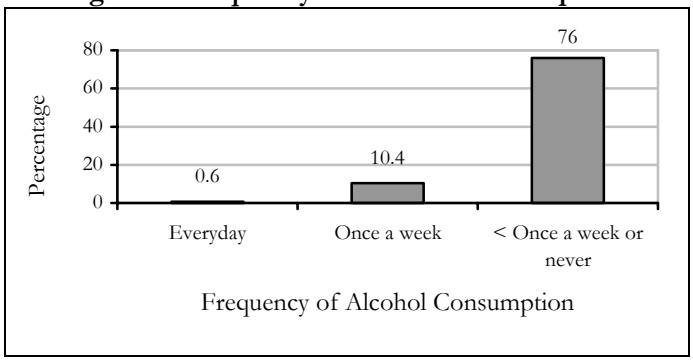
A majority (74.1%) of the FSWs are divorced or separated (Table 4). Almost one out of every five (17.7%) has never been married, and only 8.2% are currently married.

The majority of the FSWs (57.6%) reported consuming alcohol less than once a week or never, with 12.7% reported consuming alcohol daily (see Figure 6 and Table 5 in the Appendix). 19.4% of FSWs aged 25-30 years reported daily alcohol consumption, whereas 72.7% of FSWs 40 years of age or older reported consumption alcohol less than once per week or never.

About one third (30.4%) of the FSWs smoke cigarettes. Smoking is more common among the group of 19-24 years of age (39.2%). The oldest group was the least likely of any age groups to smoke (18.2%)

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.

Figure 6: Frequency of Alcohol Consumption.



The age when FSWs first had sex occurred, on average, at 16.5 years of age (presented in Table 6 in the Appendix). The average age of first sexual contact increases with age; 15.8 years of age for FSWs <19 years of age to a high of 17.6 years of age for FSWs 40 + years of age. This suggests that the age of first sexual contact is getting younger.

Overall, the average age at which FSWs first exchanged sex for money was at 24.2 years of age. By age groups, the average age at which sex was exchanged for money was 16.8 years for the youngest age group, increasing up to 39.1 years of age for the oldest age group, which is statistically significant ($F=2.77$, 4df, $p<0.05$). The short period of time that

these women have been FSWs may denote several factors: a) a relaxing of cultural norms in Georgia regarding sex; b) increase in divorce; c) depletion of resources—assets and savings—to live on; or d) a worsening in the macro-economic situation that provides few economic opportunities.

On average, the FSWs having been involved in commercial sex for 3.1 years. It appears that they have not been engaged in sex work for a long time. For example, the oldest age group has been involved in commercial sex for 4.6 years. One FSW has been involved for 26 years. A small percentage (3.1%) was involved in commercial sex prior to the collapse of the Soviet Union twelve years ago.

Only 9.5% of FSWs have other sources of income. If they did, it was generally from parental support or petty trade. Involvement in another income earning activity is more common among FSWs 19-24 years and 31-39 years of age (11.8% and 16.2%, respectively). FSWs 40 years of age or older rely solely on the money they receive from sex work.

The overwhelming majority (85.4%) of FSWs have dependents (children, parents, grandparents) that they financially support. The percentage of FSWs that financially support dependents increases with age; 61.1% for those 18 or younger increasing to 100% for those 40 years of age or older, which is statistically significant (χ^2= 12.21 (4df), $p<0.05$).

The FSWs financially support, on average, almost 4 dependents (3.9). The average number of dependents increases by age group; 2.8 dependents for the youngest FSWs to 4.8 dependents for the oldest FSWs. Also, slightly more than one-half (51.5%) of the FSWs who have dependents are either divorced or separated, and also report that sex work is their only source of income. As one consequence of few employment opportunities, and recent increases in divorce rates, economic survival seems to be 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

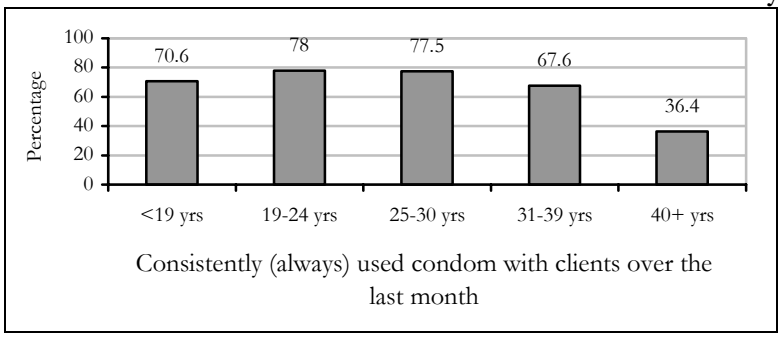
Sexual Behavior with Clients

The overwhelming majority (91.6%) of FSWs reported having clients during the last 7 days (shown in Table 7 in the Appendix). For those FSWs that reported having clients in the last 7 days, they reported, on average, 8.3 clients over this period of time (a median of 6 clients). The youngest FSWs had the lowest average number of clients in the previous 7 days (6.1) with the oldest FSWs having the highest average (9.8 clients).

The fees received for commercial sex ranged from 10 GEL to 215 GEL, for an average of 34.8 GEL. The youngest group received, on average, 47 GEL, which is double the average received by the oldest group (20.9 GEL).

The finding that older FSWs have more clients, on average, than younger FSWs may be due to several reasons. First, clients may prefer older, more experienced FSWs. Second, since older FSWs charge less they attract more clients. Third, since they charge less they must have more clients to earn a decent livable wage.

Figure 7: Consistent Use of Condoms with Clients Over the Last Month by Age Groups.



Only 1.3% of FSWs reported that they have never used a condom (Table 7). The largest percentage of FSWs who had never used a condom was for the youngest FSWs, those under 19 years of age.

The overwhelming majority (94.9%) used a condom with their last client.[12] This percentage was similar for all age groups. Almost three-quarters (74.3%) of FSWs reported that the use of the condom was their initiative, with 24.3% stating it was a mutual decision between them and their client. For the small percentage (5.1%) of FSWs that did not use a condom with their last client, they stated it was because the partner refused or the client "looked healthy."

When asked the frequency they used condoms over the last 30 days, 71.6% reported using a condom "always" with a client and 94.9% with their last commercial client. There is some concern that this high percentage of reported consistent condom use may reflect "social desirability bias," that is the FSWs reported that they used condoms because they know that they are supposed to use them. If high condom use rates are indeed correct, the high prevalence of STIs in this group suggest that regular or non-paying clients are a major risk factor for STIs[13] and/or FSWs have limited access to effective STI services.

The highest percentage of consistent use of condoms over the last 30 days is for FSWs that are 19-24 and 25-30 years of age (78.0% and 77.5%, respectively). The lowest percentage of consistent condom use is for the oldest group (36.4%).

Sexual Behavior with Regular Sexual Partners

Almost two-thirds (57.6% or 91) of FSWs have a regular sexual partner (see Table 8 in the Appendix). The percentage varies from a low of 27.3% for the oldest group up to 72.5% for those 19-24 years of age, which is statistically significant (χ^2= 10.46 (4df), $p<0.05$).

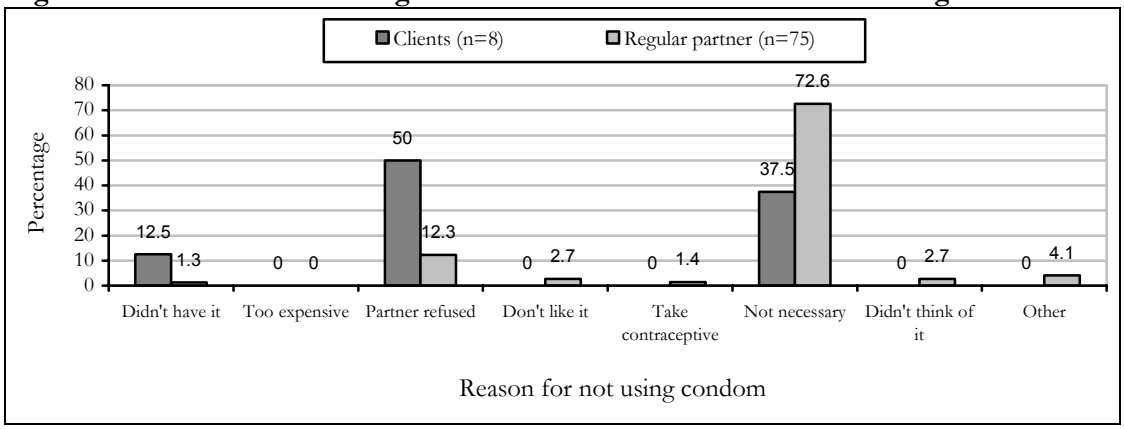
Of the 91 FSWs with a regular partner, 17.6% used a condom during the last sexual encounter. When asked who offered to use the condom, the majority (56.3%) did not know, with 25% reporting it was their initiative, 12.5% saying it was a mutual decision

[12] In the BBPS 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.

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

and 6.3% saying it was their partner's decision. When asked how frequently they use condoms with their regular partners, 6.8% reported "always" and 76.7% reported "never."

Figure 8: Reasons for Not Using a Condom at Last Sex With Client and Regular Partner.



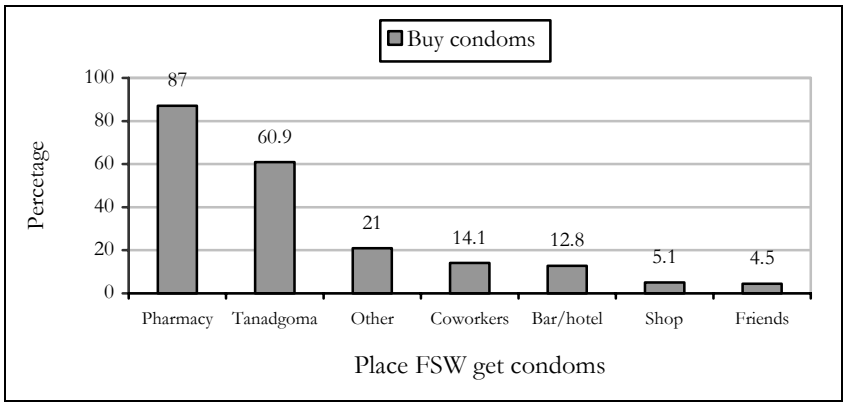
Thus, the majority (82.4%) of the 91 FSWs with a regular partner did not use a condom during the last sexual encounter. When asked why a condom was not used, 72.6% did not think it was necessary or their partner refused (12.3%).

Condom Accessibility

FSWs were asked to identify places where they usually buy or get condoms free of charge (presented in Table 9 in the Appendix). The largest percentage (87.0%) stated that they buy condoms at a pharmacy. Comparably, slightly higher percentages (90.9% - 92.7%) of the older FSWs obtain condoms at a pharmacy than for the younger age groups (80.0% - 88.2%).

Three-fifths (60.9%) reported receiving free-of-charge condoms from Tanadgoma. Again, a higher percentage of the oldest FSWs (81.8%) obtain free-of-charge condoms from Tanadgoma than the youngest age group (29.4%). The difference across the age groups seeking free-of-charge condoms was found to be statistically significant (χ^2= 9.988 (4df), p<.04 [10%<5]).

Figure 9: Place FSWs Obtain Condoms.



A small percentage (14.1%) of FSWs obtain condoms from co-workers. This practice is more common among the oldest (45.5%) and the youngest (23.5%) FSWs, which is statistically significant (χ^2= 13.071 (4df), p<.01 [20%<5]). In addition, 12.8% obtain condoms from bars and hotels.

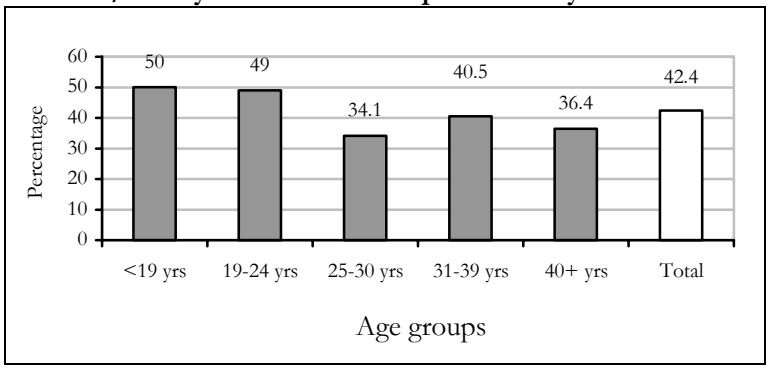
These findings show that availability and economic and physical access are not major reasons for not using condoms either with clients or partners. When condoms are not used it is due to the refusal of both client (50%) or partners and ignorance about STI/HIV (since they judge by appearance whether their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

Violence Among FSWs in Tbilisi

When asked if they had experienced either sexual or physical violence in the last year, 42.4% (or 67) reported they had (see Table 10 in the Appendix). The highest percentage (50%) of FSWs that experience sexual or physical violence is the youngest age group, those 18 years of age or less.

Of the 67 FSWs that had experienced violence in the previous year, 41.8% had experienced both, with 37.3% experiencing only sexual violence and 20.9% experiencing only physical violence.

Figure 10: Sexual and/or Physical Violence Experienced by FSWs in the Previous Year.



Of the 67 FSWs that reported experiencing violence in the previous year, 42 were willing to identify the perpetrator; of these, 52.4% reported that their client committed the violence. The next highest percentage (26.2%) identified the police. A small percentage (7.1%) were beaten or raped by a regular sexual partner. In addition, 9.5% experienced beatings or rape from strangers and 11.9% from "other " people.

STI Related Knowledge and Health Seeking Behavior

Almost all FSWs (99.4%) were aware of STIs, as shown in Table 11 in the Appendix. There was little difference in the percentage between the age groups on awareness of STIs.

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. The youngest age group of FSWs is the least informed on STIs; in this youngest age group, 23.5% could not identify one symptom for women and 38.5% could not identify one symptom for men.

Some of the most common STI symptoms for women, such as vaginal ulcer, lower abdomen pain and malodorous vaginal discharge, were identified by only 17.4%, 15.4% and 10.1 percent of FSWs, respectively.

A total of 112 (70.9%) of FSWs had at least one STI symptom (abnormal vaginal discharge and/or vulva ulcer/boil) during the last 12 months.

Of the 112 FSWs with an STI symptom, 90.2% received some treatment for these infections, while 9.8% (or 11) did not. Overall, the majority (56.8%) of these 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. This most likely occurs when an FSW has been 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) who 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 used condoms, 57.7% stopped having intercourse and 50.5% told their sex partner about the STI.

HIV/AIDS Knowledge and HIV Testing

Virtually all (98.1%) FSWs interviewed had heard of the HIV virus and AIDS (Table 12). The age group with the lowest percentage being aware of HIV/AIDS was those FSWs 25-30 years of age. Less than 1 out of every 10 FSWs (8.4%) knew of someone with HIV/AIDS.

Despite a high awareness rate of HIV, the ability of FSWs to correctly answer specific questions on HIV/AIDS was moderate to low. The percentage of FSWs that correctly answered the question about correct condom use varied from 62.0% for FSWs 19-24

years of age to 69.3% those 25-30 years of age. The question most frequently answered incorrectly was whether HIV could be spread through meal sharing followed by mosquito bites. Quite a large percentage of FSWs (91.0%) are aware of risk of infection though needle-syringe sharing. Overall, however, only one FSW (0.6%) correctly answered all six questions asked to test knowledge on HIV/AIDS.

An equally high percentage (91.6%) of these FSWs 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% did not know. The highest percentage (56.3%) that did not know was the youngest age group (<19 yrs) decreasing to 10% for the oldest age group.

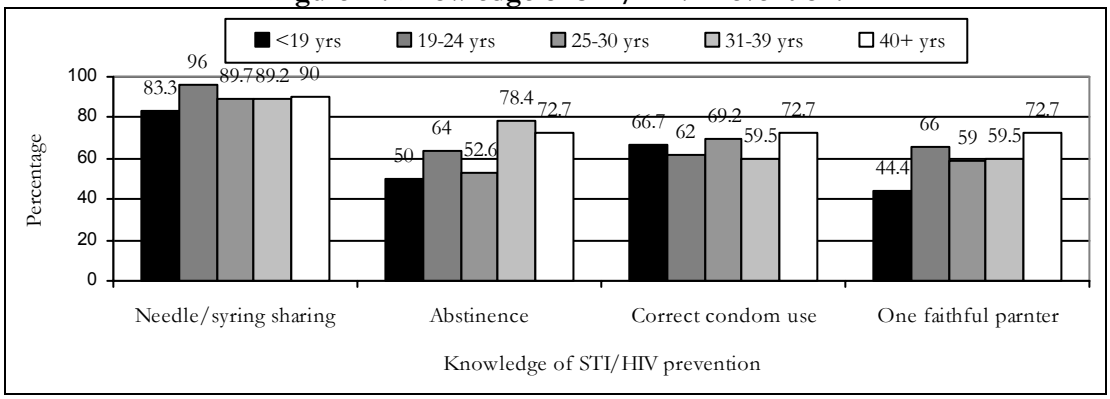
When asked various STI/HIV prevention methods, 9.6% of FSWs did not know any prevention methods. However, when FSWs did identify prevention methods, the majority (81.5%) stated the consistent use of a condom. This percentage increases with age, reaching 100% for those FSWs 40 years of age or more.

A small percentage of them are aware of other preventative methods, such as avoiding sexual contact (8.9%), restricting sexual contact to one reliable, uninfected partner (2.5%), and practicing safe sex (6.4%) through the correct use of condom.

Four out of every five FSWs (80.6%) stated that it is possible to take a confidential HIV/AIDS test in their community. Knowing about an HIV testing site in the community was highest among older FSWs.

About one-half (51.6%) of FSWs have been tested for HIV, and the majority (97.4%) has received the results. When asked if the HIV test was voluntary or not, 85% said that it was voluntary. The majority of FSWs were tested for HIV within the last year (74.4%).

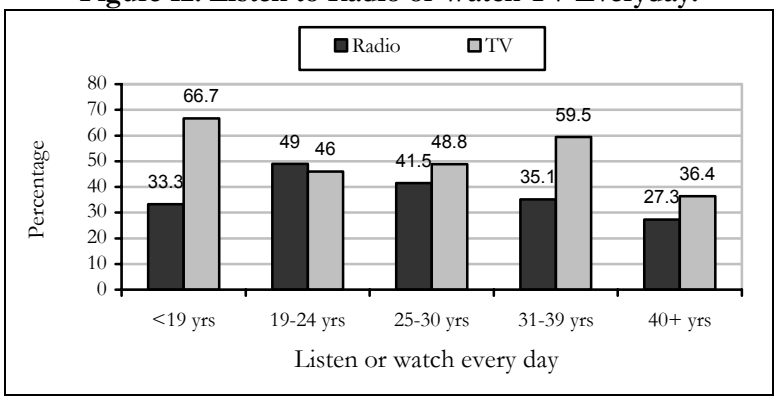
Figure 11: Knowledge of STI/HIV Prevention.



Sources of Information About HIV/AIDS

Nearly all (93.0%) of FSWs have received information on HIV/AIDS (see Table 13 in the Appendix). Those that have received information increases 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.

Figure 12: Listen to Radio or Watch TV Everyday.



FSWs report that the major source of information about HIV/AIDS comes from television (41.5%), followed by social workers (36.7%) and friends and relatives (34.0%). These sources are similar for the various age groups, except for FSWs less than 19 years of age who rely more on friends and relatives (50.0%) and those 19-24 years of age who mostly receive information from social workers (39.6%). A small percentage of FSWs (10.2%) receive information on HIV/AIDS from clients.

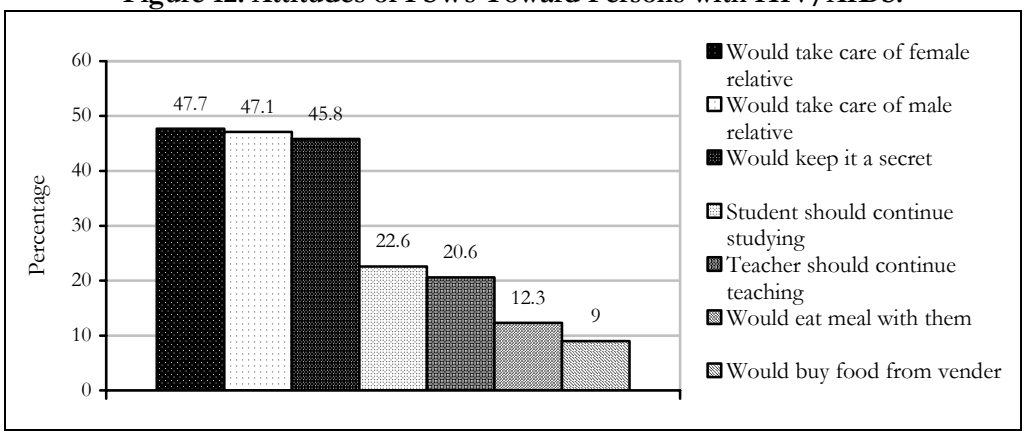
FSWs were also asked about how frequently they listen to the radio or watch TV. Two-fifths (40.5%) listen to the radio and slightly more than one-half (51.6%) watch TV daily. The younger FSWs are more likely to listen to the radio and watch TV than older FSWs.

Attitude of FSWs towards persons with HIV/AIDS

HIV/AIDS is a stigmatized topic in Tbilisi. This is made evident by the responses of FSWs to a series of questions, as shown in Table 14 in the Appendix.

Almost one-half would be willing to take care of a female or male relative with HIV infection (47.7% and 47.1%, respectively), and almost equal percentages (45.8%) would keep it a secret, if a family member had HIV.

Figure 12: Attitudes of FSWs Toward Persons with HIV/AIDS.



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

Results of HIV and STI testing

Four (4) of the FSWs tested positive on HIV antibodies by the ELISA method, but none were confirmed with HIV Western Blot (see Table 15 in the Appendix).

The most frequently detected STI was syphilis (i.e., reactive syphilis serology). Forty-eight (48) samples were positive on syphilis RPR test and 46 on syphilis TPHA test. Of these, 44 (or 28.8% of 153 specimens) were confirmed with the ELISA test. The percentage of reactive syphilis serology detected was greater among the FSWs 19-30 years of age (from 28.0% up to 38.5%).

One-quarter (25.8% or 40 of 155) of the samples were reactive on the chlamydia PCR test. The infection rate was higher for the youngest groups of <19 years of age (27.8%) and 19-24 years of age (31.4%).

Almost one out of every five (17.4% or 27 of 155) of the FSWs tested positive for gonorrhea. A comparatively higher percent of infection occurred among the youngest group (38.9%); with the percentage of gonorrhea infection decreasing with age.

For all biomarker results, testing revealed higher rates of infection among the younger FSWs (Table 15). The rate of STIs found is quite high, considering that a large percentage of FSWs reported to consistently (always) use condoms with their clients. Further analysis showed that 44.4% of FSWs with gonorrhea, 60% of FSWs with chlamydia and 47.7% with syphilis reported the consistent of condoms with clients.

The high percentage of FSWs reporting consistent use of condoms with clients may reflect their embarrassment about not using condoms consistently with their clients (social desirability bias), or those FSWs who were infected acquired the infection from their regular partner. This issue was examined further. For those FSWs having a regular partner, 22.2% had gonorrhea, 42.5% had chlamydia, and 34.1% had reactive syphilis serology. Thus, even though they reported consistent use of condoms with clients, few consistently used condoms with their regular partner.

Two Transvestites Recruited

Both transvestites recruited in the survey are very young. One is 17 and the other is 19 years of age, and they have completed their secondary education. One was born in Gori and the other in Rustavi. They have been in Tbilisi for about one year. Neither of them reports injecting drugs, but one uses inhalants. This is their first year of exchanging sex for money. Over the past week, one reports having 3 and the other 15 different clients. In the past day, one transvestite had one client that paid 30 GEL, and the other one had two clients and received 50 GEL from each client. Only one used a condom with his last client at his own initiative. When asked how often they have used condoms with their

clients over the past month, one reported "never" and the other "always." One has a "free of charge" partner with whom he never uses a condom.

In the past year, a policeman has physically beaten one. Both have heard of STIs, HIV and AIDS, one saying that he learned about them from social workers and the other from friends. One knows a person with HIV. Since the completion of the survey and the finalization of this report, both transvestites have received VCT and one was found HIV positive.

Conclusions

The BBPS surveillance survey was conducted as an activity within SC's SHIP Project, funded by USAID. It was conducted in order to establish a rigorous and replicable methodological design that would be able to 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 survey was conducted to obtain critical data and information for the following:

- Baseline information on indicators being promoted by UNAIDS in order to monitor the success of STI/HIV 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 this surveillance survey. The sampling methodology chosen for this survey required a mapping exercise of all sites for street-based sex workers in Tbilisi. As part of this mapping exercise, TG identified additional sites for outreach activities. Furthermore, the participants were quite receptive to receiving STI screening and treatment offered as part of their participation, indicating that the FSWs likely understand the risk of STIs. The survey also increased awareness among the FSWs regarding services from NGOs and the Healthy Cabinet clinic.

The second positive outcome was that NGOs and government research institutions forged new working relationships that will allow for stronger, more synergistic prevention programming in the future. Finally, the parties involved in this survey increased their data collections skills.

The vast majority of FSWs (91%) reports that sex work is their sole source of income and a similarly high percentage report that they have dependents that they support (85%).

A high percentage of FSWs (94.9%) reported using a condom with their last paying client and 71.6% reported consistent condom use in the last month with paying clients. This data is consistent with the high reported condom use among IDUs who reported having had sex with an FSW (83.5% at last sexual contact). The high reported condom use rate of FSWs with paying clients is in contrast to low reported condom use rates with non-paying clients/regular partners (17.6% at last sexual encounter and 6.8% consistently over the previous month).

The reported high rate of condom use with paying clients appears to contradict the high prevalence of STIs found in the survey group. It is possible that they stated they use condoms when they did not to please the interviewers or because they know that they should. This is known as "social desirability bias." The STI risk may come from the nonpaying or regular partners of these women, or may be related to the high level of sexual violence experienced by them (about 33.5%). The high rates might also be related to lack of access to effective STI services. In the previous year, these women sought treatment for STI-related symptoms at state clinics/hospitals (57%), treated themselves (50%), and/or got treatment from a pharmacy (40.5%). Only 13% got treatment form private clinics or hospitals.

The FSWs are aware of HIV testing services in the community and about half have been tested and received their results. Only 2 (1.3%) of the 158 FSWs interviewed reported injecting drugs. In other countries, drug-injecting FSWs can act as a "bridge" for HIV to the general population.

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 boyfriends and trusted 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 non-paying and regular partners of FSWs remains a challenge. These relationships are of unknown stability and fidelity. Trying to reach these partners and designing appropriate interventions is necessary.

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

There is clear epidemiologic and biologic 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 this survey. Good 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. 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 care 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. About one-half of the FSWs in this survey 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

Based on the informal ethnography of sex work in Tbilisi, in addition to street-based sex work, there is facility-based sex work (saunas, bath-houses and hotels) and cell phone-based sex work. This behavioral surveillance survey only studied street-based sex workers. 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 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.

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.

Reducing the risk environment interventions

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.[14] 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 – should also be considered.

Recommendations

1. FSWs in this study appear to have high condom use rates with paying clients, low use with non-paying/regular clients, high levels of treatable STIs, frequent health seeking behavior at ineffective STI services (pharmacies and self-treatment), and high levels of reported violence. 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 distribution of these messages within their networks will increase effectiveness. Strategies to address

[14] Steen, Richard and Gina Dallabetta (in press), "STI control interventions for and with sex workers," in Reproductive Health Matters.

clients will need to be developed perhaps through targeting the transactional sex setting.

3. Sexual health services with an orientation for sex work 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 general educational issues appropriate for the general populations. Specific, explicit HIV prevention messages and materials for FSWs and their clients are best done at the interpersonal level through outreach workers and peer educators rather than through mass media outlets.

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

6. Voluntary HIV testing and counseling, 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 though sites that provide other HIV prevention and sexual health services to FSWs.

7. The apprehension of FSWs for forced testing and treatment by the police is not an effective strategy. In the short-term, public health officials and NGOs should negotiate with local authorities for a more pragmatic and flexible application of law and regulations and, in the long-term, address these at a higher level.

8. Organizations working with gender-based violence should expand their services to include FSWs as a target group.

9. Interventions for FSW populations must be extended beyond Tbilisi. Based on information from the Public Health Officials in Batumi, for example, commercial sex is common there. High-risk sites should be identified and prevention interventions begun. Typical sites include urban areas, ports and commercial transit areas, cross-boarder areas with Turkey, and Georgian and Russian military sites where large numbers of workers without their families reside.

10. In a recent survey among youth, 84% of males 15-17 years of age thought is was "ok" to start their sexual life before marriage with an FSW. [15] Moreover, 74% reported that they had had sexual intercourse. In light of these findings, organizations working with youth should promote healthy life styles 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.

11. Non-coercive, anonymous, ethical and systematic surveillance of FSWs (and other high risk groups), both behavioral and of selected biologic markers, should be conducted throughout Georgia and repeated on a regular basis to monitor whether interventions are working.

[15] Youth Reproductive Health Survey, UNFPA, 2002, Tbilisi, Georgia.

Appendix of Data Tables

Table 1: Area Coverage of the Tbilisi, Georgia, Behavioral Surveillance and Biomarker Survey.

Location	Tbilisi
Date of interviews	4 - 28 November, 2002
Location of interview (n) At organizations office (Tanadgoma)	100.0% (158)
Recruitment (n) Recruitment of FSWs in sections of Tbilisi identified through mapping	100% (158)
Participation rate Total contacted Total agreed Total completed	 184 158 158

Table 2: Reasons reported by FSWs for refusal to participate in survey.

Reason for refusals	**Number of refusals** (N=26)
Not interested	65.4% (17)
Had a medical check-up and is currently healthy	23.1% (6)
Is receiving treatment for some STI	7.7% (2)
Afraid of needle/syringe to give blood	3.9% (1)

Table 3: Demographic Characteristics of FSWs.

Characteristics (n)	
Age	(158)
Mean Age (years)	27.1
Median Age (years)	26.0
Age Groups	(158)
<19yrs	11.4%(18)
19 – 24 yrs	32.3% (51)
25 – 30 yrs	25.9% (41)
31 – 39 yrs	23.4% (37)
40 + yrs	6.9%(11)
Ethnicity (%)	(158)
Georgian	79.7% (126)
Russian	6.3% (10)
Ukrainian	2.5% (4)
Ossetian	1.9% (3)
Armenian	2.5% (4)
Jew	1.9% (3)
Ezid	1.3% (2)
Kabardoan	1.3% (2)
Kurd	1.3% (2)
Greek	0.6% (1)
Mari	0.6% (1)
Level of Education (%)	(154)
None	0.6% (1)
Primary	10.4% (16)
Secondary/vocational	76.0% (117)
Incomplete higher	--
Higher	13.0% (20)
Mean yrs of education	10.9
Internally Displaced Person	
Yes	3.8% (6)
Place of Birth	(156)
Tbilisi	35.9% (56)
Another city in Georgia	56.3% (89)
Other country	7.1% (11)
Russia	5.1% (8)
Ukraine	1.3% (2)
Israel	0.6% (1)
Present living place (%)	
Tbilisi	100%(158)
(yrs lived there)	mean=13.0 median=9.0
Commercial sex activity in another city (%)	9.5%(15)

Table 4: Living Arrangements by Marital Status of FSWs.

	Never married	Married	Divorced/ separated
Percentage (n)	17.7% (28)	8.2% (13)	74.1% (117)
Mean Age	20.8	30.4	28.3
Age at marriage (yrs)			
Mean	-	15.5	16.8
Median	-	15.0	16.0
With Whom Do You Live Now?			
- Married, living with husband	--	30.8%(4)	--
- Married, living with partner	--	30.8%(4)	--
- Married not living with husband/partner	--	23.1%(3)	40.2%(47)
Married, has both husband and partner	--	15.4%(2)	--
- Not married, living with partner	--	--	--
- Not married, living alone	46.4% (13)	--	--
- Other	50.0% (14)	--	58.1%(68)
- Refused to answer	--	--	--
	0.6%(1)		1.7%(2)
Do you have financial dependents	(27)	(10)	(118)
Yes	64.0%(18)	100%(10)	88.1%(104)
No	32.1%(9)	-	11.9%(14)
Does your spouse have other partner/lover	(7)	(10)	(36)
- Yes	--	-	8.3% (3)
- No	85.7% (6)	90.0% (9)	88.9% (32)
- Don't know	14.3% (1)	10.0% (1)	2.8% (1)
Have you ever been married χ^2 *= 36.438 (4df), p<.000 (20%<5)*			

Table 5: Drug and Alcohol Use by FSWs.

Drug & Alcohol Use (n)	Total	Age Groups				
		<19	19-24	25-30	31-39	40+
	(n=158)	(n=18)	(n=51)	(n=41)	(n=37)	(n=11)
Consumption of alcohol						
Every day	12.7%(20)	16.7%(3)	11.8%(6)	19.4%(7)	5.4%(2)	9.1%(1)
Once a week	29.7%(47)	38.9%(7)	35.3%(18)	11.1%(4)	40.5%(15)	18.1%(2)
Less than once a week or never	57.6%(91)	44.4%(8)	52.9%(27)	69.4%(25)	54.1%(1)	72.7%(8)
Smoke cigarettes	30.4%(48)	27.8%(5)	39.2%(20)	25.0%(9)	27.0%(10)	18.2%(2)
Ever took pills	1.9%(3)	5.6%(1)	3.9%(2)	5.6%(2)	2.7%(1)	9.1%(1)
Ever used inhalants	1.9%(3)	--	3.9%(2)	--	2.7%(1)	--
Ever injected drugs	1.3%(2)	--	--	5.6%(2)	--	--

Table 6: Aspects of Sex Work for FSWs.

Characteristics (n)	Total	Age Groups				
		<19	19-24	25-30	31-39	40+
	(n=158)	(n=18)	(n=51)	(n=41)	n=37	(n=11)
Age at 1st sexual contact	(158)	(18)	(51)	(41)	(37)	(11)
Mean	16.5	15.8	15.9	16.6	17.4	17.6
Median	16.0	16.0	16.0	17.0	17.0	18.0
Age when 1st received money in exchange for sex	(156)	(17)	(50)	(41)	(37)	(11)
Mean	24.2	16.8	19.8	24.3	28.8	39.1
Median	23.0	17.0	19.5	24.0	31.0	40.0
Years working as sex worker	(156)	(17)	(50)	(41)	(37)	(11)
Mean	3.1	0.94	1.2	2.8	5.4	4.6
Have another source of income	(158)	(18)	(51)	(41)	(37)	(11)
No	90.5%	94.4%	88.2	95.1%	83.8%	100%
Yes	9.5%	5.6	11.8%	4.9	16.2%	0.0%
If yes, what?	(12)	(1)	(4)	(2)	(5)	(0)
Parents help	1.3%	100%	25.0%	--	--	--
Private business	1.3%	--	25.0%	--	20.0%	--
Trade (products);	1.3%	--	25.0%	--	20.0%	--
Have a booth (kiosk)	1.3%	--	--	50.0%	20.0%	--
Waitress in a bar	0.6%	--	25.0%	--	--	--
Trade in market	0.6%	--	--	50.0%	--	--
Pension	0.6%	--	--	--	20.0%	--
Housemaid	0.6%	--	--	--	20.0%	--
Do you have financial dependents?	(158)	(18)	(51)	(41)	(37)	(11)
No	14.6%	38.9%	11.8%	17.1%	8.1%	--
Yes	85.4%	61.1%	88.2%	82.9%	91.9%	100.0%
If yes, how many?	(134)	(11)	(44)	(34)	(34)	(11)
Mean	3.9	2.8	3.9	4.1	3.8	4.8

Age at 1st commercial sex encounter by age groups: F=2.77, 4df, p<0.05. (Younger FSW started at a younger age than older FSWs.)

Have financial dependents by age groups: χ^2= 12.21 (4df), p<0.05. (A greater % of younger FSWs have financial dependents than older FSWs.)

Table 7: Sexual Behavior of FSWs with Paying Clients.

Characteristics (n)	Total	Age Groups				
		<19	19-24	25-30	31-39	40+
	(n=158)	(n=18)	(n=51)	(n=41)	n=37	(n=11)
Ever used a condom with any sex partner (no)	1.3% (2/157	5.6% (1/18)	0.0% (0/50)	2.4% (1/41)	0.0% (0/37)	0.0% (0/11)
Did you have paying clients in the previous 7 days	(154)	(17)	(50)	(40)	(36)	(11)
No	8.4%	--	14.0%	10.0%	2.8%	9.1%
Yes	91.6%	100.0%	86.0%	90.0%	97.2%	90.9%
If yes,	(141)	(17)	(43)	(36)	(35)	(10)
Mean	8.3	6.1	7.3	9.5	8.7	9.8
Median	6.0	5.0	6.0	7.5	5.0	6.5
Number of clients during your last business day	(157)	(18)	(50)	(41)	(37)	(11)
Mean	1.9	2.2	1.8	2.1	1.8	1.9
Median	1.0	1.0	2.0	2.0	1.0	1.0
How much last client paid	(154)	(18)	(50)	(40)	(35)	(11)
Mean (in Lari)	34.8	46.9	31.5	34.9	37.7	20.9
Median (in Lari)	30.0	40.0	30.0	30.0	30.0	20.0
Condom use with the last client	(156)	(18)	(50)	(40)	(37)	(11)
Yes	94.9%	94.4%	98.0%	92.5%	94.6%	90.9%
No	5.1%	5.6%	2.0%	7.5%	5.4%	9.1%
Who offered the use a condom	(148)	(17)	(49)	(37)	(35)	(10)
My initiative	74.3%	70.6%	69.4%	78.4%	82.9%	60.0%
Client's initiative	1.4%	--	2.0%	2.7%	--	--
Mutual initiative	24.3%	29.4%	28.6%	18.9%	17.1%	40.0%
Reasons for not using condoms during the last paid sexual contact	(8)	(1)	(1)	(3)	(2)	(1)
Did not have	12.5%	0.0%	0.0%	33.3%	0.0%	0.0%
Too expensive	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Partner refused	50.0%	100.0%	100.0%	33.3%	0.0%	0.0%
Don't like it	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%
Didn't think it was needed (he looked healthy, trust)	37.5%	0.0%	0.0%	33.3%	100.0%	0.0%
Didn't think of it	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Condom use with paying clients during the last 30 days	(155)	(17)	(50)	(40)	(37)	(11)
Always –1	71.6%	70.6%	78.0%	77.5%	67.6%	36.4%
Nearly always – 2	22.65	23.5%	18.0%	20.0%	24.3%	45.5%
Sometimes – 3	5.2%	5.9%	4.0%	2.5%	8.1%	18.2%
Never – 4	0.6%	--	--	--	--	--
Mean	1.4	1.4	1.3	1.3	1.4	1.8

Table 8: Sexual Behavior of FSWs with Regular Partners.

Characteristics (n)	Total	Age Groups				
		<19	19-24	25-30	31-39	40+
	(n=158)	(n=18)	(n=51)	(n=41)	n=37	(n=11)
Has regular partner	(158)	(18)	(51)	(41)	(37)	(11)
Yes	57.6%	50.0%	72.5%	58.5%	48.6%	27.3%
No	42.4%	50.0%	27.5%	41.5%	51.4%	72.7%
Did you have sex with your non-paying/regular partners in the previous 7 days?	(157)	(17)	(51)	(41)	(37)	(11)
No	49.0%	58.8%	43.1%	46.3%	51.4%	63.6%
Yes	51.0%	41.2%	56.9%	53.7%	48.6%	36.4%
If yes,	(80)	(7)	(29)	(22)	(18)	(10)
Mean	1.1	1.0	1.1	1.1	1.2	1.5
Median	1.0	1.0	1.0	1.0	1.0	1.5
Number of sexual intercourse with partner over the last 30 days	(87)	(8)	(34)	(24)	(18)	(3)
Up to 5 times	43.7%	25.0%	50.0%	45.8%	38.9%	33.3%
5-9 times	18.4%	25.0%	17.6%	16.7%	22.2%	--
10-15 times	8.0%	12.5%	8.8%	4.2%	11.1%	--
More than 15	27.6%	37.5%	20.6%	33.3%	22.2%	66.7%
Don't know/can't remember	2.3%	--	2.9%	--	5.6%	--
Condom use during the last sexual intercourse with partner	(91)	(9)	(37)	(24)	(18)	(3)
Yes	17.6%	22.2%	13.5%	16.7%	22.2%	33.3%
No	82.4%	77.8%	86.5%	83.3%	77.8%	66.7%
Who offered to use a condom	(16)	(2)	(5)	(4)	(4)	(1)
FSW's initiative	25.0%	--	20.0%	25.0%	25.0%	100.0%
Non-paying/regular partners	6.3%	--	--	--	25.0%	--
Mutual initiative	12.5%	50.0%	20.0%	--	--	--
No response	56.3%	50.0%	60.0%	75.0%	50.0%	--
Reasons for not using condom during last sexual intercourse with partner	(75)	(7)	(32)	(20)	(14)	(2)
Didn't have it	1.3%	--	--	5.0%	--	--
Too expensive	--	--	--	--	--	--
Partner refused	12.3%	--	9.4%	10.5%	28.6%	--
Don't like it	2.7%	--	--	5.3%	7.1%	--
Take Contraception	1.4%	--	3.1%	--	--	--
Didn't think needed He looked healthy	72.6%	83.3%	81.2%	68.4%	50.0%	100.0%
Didn't think of it	2.7%	--	--	5.3%	7.1%	--
Other	4.1%	--	3.1%	5.3%	7.1%	--
Frequency of using a condom with regular partner	(73)	(6)	(28)	(21)	(16)	(2)
Always – 1	6.8%	--	7.1%	4.8%	6.3%	50.0%
Nearly always – 2	2.7%	--	7.1%	--	--	--
Sometimes – 3	13.7%	16.7%	7.1%	19.0%	18.8%	--
Never – 4	76.7%	83.3%	78.6%	76.2%	75.0%	50.0%
Mean	3.6	3.8	3.6	3.7	3.6	2.5
Condom use with any partner	(157)	(18)	(50)	(41)	(37)	(11)
Yes	98.7%	94.4%	100.0%	97.6%	100.0%	100.0%
No	1.3%	5.6%	--	2.4%	--	--

Has partner by age groups: $\chi^2 = 10.46$ *(4df), p<0.05. (A greater % of younger FSWs have free of charge partners than older FSWs.)*

Table 9: Access to Condoms for FSWs.

	Total	Age Groups				
		<19	19-24	25-30	31-39	40+
	(n=156)	(n=18)	(n=51)	(n=41)	n=37	(n=11)
Where do you go to get condoms?						
Pharmacy	87.0%(137)	88.2%(15)	80.0%(40)	92.7%(38)	91.9%(34)	90.9%(10)
Tanadgoma*	60.9%(95)	29.4%(5)	64.0%(32)	65.9%(27)	59.5%(22)	81.8%(9)
Other places	16.0%(25)	17.6%(3)	14.0%(7)	24.4%(10)	10.8%(4)	9.1%(1)
Among girls/coworkers**	14.1%(22)	23.5%(4)	14.0%(7)	9.8%(4)	5.4%(2)	45.5%(5)
Bar/hotel	12.8%(20)	17.6%(3)	22.0%(11)	4.9%(2)	8.1%(3)	9.1%(1)
Shops	5.1%(8)	5.9%(1)	6.0%(3)	-	8.1%(3)	9.1%(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)	-	2.0%(1)	2.4%(1)	2.7%(1)	-
Hospital	0.6%(1)	-	-	-	2.7%(1)	-
Family Planning Center	0.6%(1)	-	-	-	2.7%(1)	-
Time necessary for buying/getting a condom	(148)	(15)	(48)	(41)	(35)	(10)
Less than 5 minutes	75.0%(111)	73.3%(11)	74.5%(35)	75.6%(31)	77.1%(27)	70.0%(7)
5-15 minutes	18.2%(27)	13.3%(2)	23.4%(11)	14.6%(6)	20.0%(7)	10.0%(1)
15-30 minutes	6.1%(9)	13.3%(2)	2.1%(1)	7.3%(3)	2.9%(1)	20.0%(2)
30 minutes or more	0.7%(1)	-	-	2.4%(1)	-	-
Number of condoms FSW have with them or at place of work	(152)	(17)	(50)	(40)	(34)	(11)
None	53.9%	70.6%	60.0%	45.0%	50.0%	45.5%
Yes	46.1%	29.4%	40.0%	55.0%	50.0%	54.5%
Minimum	1	1	1	1	1	1
Maximum	100	2	8	50	100	7
Mean	5.6	1.2	3.3	6.7	8.9	4.2

χ^2 = 9.988 (4df), p<.04 (10%<5)

**χ^2 = 13.071 (4df), p<.01 20%<5)*

Table 10: Violence Among FSWs.

	Total	Age Groups				
		<19	19-24	25-30	31-39	40+
	(n=158)	(n=18)	(n=51)	(n=41)	n=37	(n=10)
FSW experience either sexual or physical violence during last year	42.4% (67)	50.0% (9)	49.0% (25)	34.1% (14)	40.5% (15)	36.4% (4)
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 11: STI Knowledge and Health Seeking Behavior Among FSWs.

	Total	Age Groups				
		<19	19-24	25-30	31-39	40+
	(n=158)	(n=18)	(n=51)	(n=41)	n=37	(n=11)
Aware of STIs	99.4%(157)	94.4%(17)	100%(51)	100%(41)	100%(36)	100%(11)
Knowledge of STI symptoms observed among women	(149)	(17)	(47)	(39)	(36)	(10)
Abnormal vaginal discharge	71.8%(107)	64.7%(11)	76.6%(36)	67.5%(27)	69.4%(25)	80.0%(8)
Burning on urination	38.2%(57)	41.2%(7)	53.2%(25)	35.0%(14)	25.0%(9)	20%(2)
Vulvar itching	32.9%(49)	11.8%(2)	42.6%(20)	--	22.2%(8)	60%(6)
Vaginal ulcer	17.4%(26)	--	19.1%(9)	12.5%(5)	22.2%(8)	10.0%(1)
Lower abdomen pain	15.4%(23)	--	17.0%(8)	22.5%(9)	8.6(3)	30.0%(3)
Other	14.1%(21)	5.9%(1)	17.0%(8)	12.5%(5)	16.7%(6)	10.0%(1)
Genital eruption	10.7%(16)	11.8%(2)	6.4%(3)	5.0%(2)	16.7%(6)	--
Odor	10.1%(15)	17.6%(3)	12.8%(6)	32.5%(13)	11.1%(4)	--
Know at least one symptom	91.9%(137)	76.5%(13)	95.7%(45)	94.9%(37)	94.3%(33)	90.0%(9)
Do not know any	8.1%(12)	23.5%(4)	4.2%(2)	7.5%(3)	5.6%(2)	10.0%(1)
Knowledge of STI symptoms observed among men	(129)	(13)	(38)	(37)	(30)	(11)
Urethral discharge	60.5%(78)	38.5%(5)	71.1%(27)	56.8%(21)	60.0%(18)	63.6%(7)
Burning on urination	20.1%(30)	30.8%(4)	26.3%(10)	24.3%(9)	16.7%(5)	18.2%(2)
Itching	14.7%(19)	7.7%(1)	15.8%(6)	13.5%(5)	6.7%(2)	45.4%(5)
Genital ulcer	10.1%(13)	--	10.5%(4)	13.5%(5)	10.0%(3)	9.1%(1)
Other	7.8%(10)	--	10.5%(4)	2.7%(1)	13.3%(4)	9.1%(1)
Eruption	6.2%(8)	7.7%(1)	5.3%(2)	5.4%(2)	10.0%(3)	--
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)	61.5%(8)	89.5%(34)	75.5%(28)	83.3%(25)	81.8%(9)
Do not know any	19.4%(25)	38.5%(5)	10.5%(4)	24.3%(9)	16.7%(5)	18.2%(2)
Had STI symptoms in the last 12 months	(155)	(17)	(50)	(41)	(36)	(11)
Abnormal vaginal discharge	70.3%(109)	70.6%(12)	70.0%(35)	78.0%(32)	63.9%(23)	63.6%(7)
	(154)	(17)	(48)	(41)	(37)	(11)
Vaginal ulcer/boil	11.0%(17)	17.6%(3)	10.4%(5)	14.6%(6)	8.1%(3)	--
Received treatment at:	(111)	(13)	(35)	(32)	(24)	(7)
State clinic/hospital	56.8%(62)	53.8%(7)	57.1%(20)	62.5%(20)	50.0%(12)	57.1%(4)
Applied self-treatment	50.0%(56)	46.2%(6)	38.9(14)	53.1%(17)	66.7%(16)	42.9%(3)
Pharmacy	40.5%(44)	38.5%(5)	34.3%(12)	43.8%(14)	50.0%(12)	28.6%(2)
Private clinic/hospital	12.6%(13)	7.7%(1)	17.1%(6)	12.5%(4)	4.1%(1)	28.6%(2)
Traditional healer	4.5%(5)	7.7%(1)	2.9%(1)	--	8.3%(2)	14.3%(1)
Mean # treatment options used	2.1	1.8	1.9	2.3	2.3	2.3
Sexual behavior during symptomatic period	(111)	N=13	N=36	N=32	N=24	N=7
Used condoms	67.3%(74)	61.5%(8)	76.5%(26)	65.6%(21)	62.5%(15)	57.1%(4)
Stopped intercourse	57.7%(64)	46.2%(6)	48.6%(17)	71.9%(23)	61.5%(15)	42.9%(3)
Told sexual partner about STI	50.5%(56)	23.1%(3)	45.7%(16)	62.5%(20)	54.2%(13)	57.1%(4)

Table 12: HIV/AIDS Knowledge and Testing Among FSWs.

	Total	Age Groups				
		<19	19-24	25-30	31-39	40+
	(n=158)	(n=18)	(n=51)	(n=41)	n=37	(n=11)
Awareness of HIV/AIDS	98.1%(155)	100%(18)	98.0%(50)	95.1%(39)	100%(37)	100.0%(11)
Know Person w/ HIV/AIDS	(154)	(17)	(50)	(39)	(37)	(11)
Yes	8.4%(13)	11.8%(2)	8.0%(4)	10.3%(4)	5.4%(2)	9.1%(1)
Close friend or relative	1.9%(3)	--	2.0%(1)	2.6%(1)	2.7%(1)	--
Key HIV/AIDS Knowledge	(155)	(18)	(50)	(39)	(37)	(11)
Needle/syringe sharing	91.0%(141)	83.3%(15)	96.0%(48)	89.7%(35)	89.2%(33)	90.9%(10)
Abstinence	63.6%(98)	50.0%(9)	64.0%(32)	52.6%(20)	78.4%(29)	72.7%(8)
Correct condom use	63.9%(98)	66.7%(12)	62.0%(31)	69.2%(27)	59.5%(22)	63.6%(7)
One faithful partner	60.6%(94)	44.4%(8)	66.0%(33)	59.0%(23)	59.5%(22)	72.7%(8)
Mosquito bites (no)	16.1%(25)	11.1%(2)	14.0%(7)	10.3%(4)	24.3%(9)	27.3%(3)
Meal-sharing (no)	11.6%(17)	16.7%(3)	10.0%(5)	7.7%(3)	13.5%(5)	18.2%(2)
All Items Correct	0.6%(1)	0.0%	0.0%	2.6%(1)	0.0%	0.0%
MTCT during pregnancy	91.6%(142)	89.9%(16)	90.0%(45)	92.3%(36)	94.6%(35)	90.9%(10)
Through breastfeeding	78.1%(121)	78.9%(15)	72.0%(36)	82.1%(32)	78.4%(29)	81.8%(9)
Actions for reducing risk of MTCT	(141)	(16)	(45)	(35)	(35)	(10)
Don't know	35.5%(50)	56.3%(9)	33.3%(15)	40%(14)	31.4%(11)	10.0%(1)
Abortion	27.7%(39)	18.8%(3)	28.9%(13)	20%(7)	34.3%(12)	40.0%(4)
Take ARVs	24.8%(35)	25.0%(4)	20.0%(9)	28.6%(10)	25.7%(9)	30.0%(3)
Nothing	5.7%(8)	--	4.4%(2)	8.6%(3)	2.9%(1)	20.0%(2)
Receive treatment	3.5%(5)	--	6.7%(3)	2.9%(1)	2.9%(1)	--
See physician	2.1%(3)	--	4.4%(2)	--	2.9%(1)	--
Refrain from sex	0.7%(1)	--	2.2%(1)	--	--	--
Knowledge of STI/HIV prevention routes	(157)	(18)	(50)	(41)	(37)	(11)
Condom use	81.5%(128)	77.8%(14)	70.0%(35)	80.5%(33)	94.6%(35)	100%(11)
Don't know	9.6%(15)	16.7%(3)	14.0%(7)	9.8%(4)	-	-
Avoiding sexual contacts	8.9%(14)	5.6%(1)	14.0%(7)	7.3%(3)	2.7%(1)	9.1%(1)
Safe forms of sex	6.4%(10)	-	6.0%(3)	9.8%(4)	-	9.1%(1)
Sex with one faithful partner	2.5%(4)	-	6.0%(3)	-	-	9.1%(1)
Other STI/HIV routes	(158)	(18)	(51)	(41)	(37)	(11)
A person with blood group A can get STI/HIV	58.9%(93)	55.6%(10)	51.0%(26)	61.0%(25)	64.9%(24)	72.7%(8)
Don't know	25.9%(41)	38.9%(7)	25.5%(13)	24.4%(10)	24.3%(9)	18.2%(2)
A person looking healthy can't be infected with HIV	6.5%(10)	11.1%(2)	9.8%(5)	2.6%(1)	2.7%(1)	9.1%(1)
Knows HIV testing site in a community	(155)	(18)	(50)	(39)	(37)	(11)
Yes	80.6%(125)	72.2%(13)	78.0%(39)	82.1%(31)	83.8%(31)	90.9%(10)
No	11.6%(18)	16.7%(3)	12.0%(6)	10.3%(4)	13.5%(5)	--
Don't know	7.7%(12)	11.1%(2)	10.0%(5)	7.7%(3)	2.7%(1)	9.1%(1)
Confidential HIV test						
Had test	51.6%(80)	44.4%(8)	50.0%(25)	56.4%(22)	45.9%(17)	72.7%(8)
Voluntary	85.0%(68)	62.2%(5)	88.0%(22)	86.4%(19)	88.2%(15)	87.5%(7)
Received result	97.4%(76)	100%(7)	100%(25)	100%(22)	88.2%(15)	87.5%(7)
Time of the last HIV test	(78)	(7)	(25)	(22)	(17)	(7)
This year	74.4%(58)	71.4%(5)	72.0%(18)	95.5%(21)	52.9%(9)	71.4%(5)
1-2 yrs ago	11.5%(9)	28.6%(2)	12.0%(3)	4.5%(1)	17.6%(3)	14.3%(1)
2-4 yrs ago	10.3%(8)	--	12.0%(3)	--	23.5%(4)	--
>4 yrs ago	3.8%(3)	--	4.0%(1)	--	5.9%(1)	14.3%(1)

Table 13: Sources of Information on STI/HIV.

	Total	Age groups				
		<19	19-24	25-30	31-39	40+
	(n=158)	(n=18)	(n=51)	(n=41)	n=37	(n=11)
Number of FSWs received information on HIV/AIDS	93.0%(147)	77.8%(14)	94.1%(48)	92.7%(38)	97.3%(36)	100.0%(11)
Source of information about AIDS	(147)	(14)	(48)	(38)	(36)	(11)
T.V.	41.5%(61)	28.6%(4)	33.3%(16)	47.4%(18)	50.0%(18)	45.5%(5)
Social workers	36.7%(53)	35.7%(5)	39.6%(19)	36.8%(14)	38.9%(14)	18.2%(2)
Friends/relatives	34.0%(50)	50.0%(7)	31.3%(15)	26.3%(10)	36.1%(13)	27.3%(3)
Magazines/journals	25.2%(37)	28.6%(4)	20.8%(10)	31.6%(12)	25.0%(9)	18.2%(2)
Other	25.2%(37)	21.4%(3)	25.0%(12)	26.3%(10)	16.7%(6)	45.5%(5)
Clients	10.2%(15)	7.1%(1)	10.4%(5)	10.5%(4)	13.9(5)	--
Family member	3.4%(5)	7.1%(1)	6.2%(3)	--	--	9.1%(1)
Frequency of listening to radio during the last 4 weeks	(158)	(18)	(51)	(41)	(37)	(11)
Every day	40.5%(64)	33.3%(6)	49.0%(25)	41.5%(17)	35.1%(13)	27.3%(3)
No less than once a week	10.1%(16)	16.7%(3)	13.7%(7)	4.9%(2)	10.8%(4)	--
Less then once a week	7.0%(11)	5.6%(1)	9.8%(5)	7.3%(3)	5.4%(2)	--
Never within the last 4 weeks	41.8%(66)	44.4%(8)	27.5%(14)	43.9%(18)	48.6%(18)	72.7%(8)
Frequency of watching TV during the last 4 weeks	(157)	(18)	(50)	(41)	(37)	(11)
Every day	51.6%(81)	66.7%(12)	46.0%(23)	48.8%(20)	59.5%(22)	36.4%(4)
No less than once a week	20.4%(32)	11.1%(2)	26.0%(13)	22.0%(9)	18.9%(7)	9.1%(1)
Less then once a week	8.3%(13)	5.1%(1)	6.0%(3)	12.2%(5)	10.8%(4)	--
Never within the last 4 week	19.7%(31)	16.7%(3)	22.0%(11)	17.1%(7)	10.8%(4)	54.4%(6)

Table 14: Attitude of FSWs Towards Persons with HIV/AIDS.

	Total	Age groups				
		<19	19-24	25-30	31-39	40+
	(n=158)	(n=18)	(n=51)	(n=41)	(n=37)	(n=11)
Would you take care of your woman relative HIV patient at your place	47.7%(74/155)	50.0%(9/18)	46.0%(23/50)	53.8%(21/39)	37.8%(14/37)	63.6%(7/11)
Would you take care of your male relative HIV patient at your place	47.1%(73/155)	50.0%(9/18)	44.0%(22/50)	51/3%(2/39)	40.5%(15/37)	63.6%(7/11)
Would you keep secret if a family member is HIV positive	45.8%(71/155)	33.3%(6/18)	64.0%(32/50)	46.2%(18/39)	27.0%(10/37)	45.5%(5/11)
A student with HIV has a right to continue study	22.6%(35/155)	27.8%(5/18)	14.0%(7/50)	25.6%(10/39)	27.0%(10/37)	27.3%(3/11)
HIV infected teacher has a right to continue teaching	20.6%(32/155)	16.7%(3/18)	16.0%(8/50)	23.1%(9/39)	18.9%(7/37)	45.5%(5/11)
Would you like to have a meal with person with STI/HIV	12.3%(19/155)	5.6%(1/18)	6.0%(3/50)	12.8%(5/39)	18.9%(7/37)	27.3%(3/11)
Would you buy food from HIV positive salesman	9.0%(14/155)	11.1%(2/18)	6.0%(3/50)	7.7%(3/39)	13.5%(5/37)	9.1%(1/11)

Table 15: STI/HIV Prevalence Among FSWs.

STI/HIV markers	Total	Age groups				
		<19	19-24	25-30	31-39	40+
	(n=158)	(n=18)	(n=51)	(n=41)	(n=37)	(n=11)
Syphilis (RPR, TPHA with ELISA confirmation)	28.8%(44/153)	5.6%(1/18)	28.0%(14/50)	38.5%(15/39)	33.3%(12/36)	20.0%(2/10)
Chlamydia trachomatis	25.3%(40/155)	27.8%(5/18)	31.4%(16/51)	24.4%(10/41)	25.0%(9/36)	0.0% (0/9)
Neisseria gonorrhoeae	17.4%(27/155)	38.9%(7/18)	17.6%(9/51)	17.1%(7/41)	8.3%(3/36)	11.1%(1/9)
% with no STI	44.7% (68/152)	38.9% (7/18)	42.0% (21/50)	43.6% (17/39)	44.4% (16/36)	77.8% (7/9)
% with 1 STI	40.1% (61/152)	50.0% (9/18)	42.0% (21/50)	33.3% (13/39)	44.4% (16/36)	22.2% (2/9)
% with 2 or more STIs	15.2% (23/152)	11.1% (2/18)	14.0% (8/50)	23.1% (9/39)	11.1% (4/36)	0.0% (0/0)
HIV (ELISA with Western Blot confirmation)	0 (0/153)	0	0	0	0	0

Survey Questionnaire

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

HIV/AIDS/STI Behavior Surveillance Studies (BBPS)
Female Commercial Sex Workers

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:

Interviewer's Code

Introduction: "My name is_____. American and Georgian organizations are implementing 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

Female Commercial Sex Workers Questionnaire:

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 and A2, if necessary!)
A2.1 Month /_____/_____/
Don't know 88

No response 99

A2.2 Month /_____/_____/
Don't know 88
No response 99

A3. What education have you received: primary, secondary, higher?
No education 0
Primary: 1
Secondary (general or vocational school, or incomplete higher) 2
Higher 3
No response 9

A4. How many years did you study in total?
/_____/ (please specify the number of years)
No response: 99

A5. Where were you born?
/_____/ (open question/please specify)
Don't know: 88
No response: 99

A6. How long have you lived here (please specify city/town/village)?
Number of years: /_____/ (if less than one year, write down 0)
Don't know: 88
No response: 99

A6.A 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?
/_____/ (please specify the number of months)
Never worked at any other place: 88
No response: 99

A8. What is your religious affiliation? (Please circle one)
Orthodox: 1
Gregorian 2
Roman Catholic 3
Judaism 4
Islam 5
Other (please specify) _____
None 88
No response 99

A9. What's your nationality? (Mark just one option)
Georgian 1
Russian 2
Armenian 3
Jew 4
Azeri 5
Ukrainian 6
Kurdish 7
Ossetian 8
Greek 9
Other (please specify) _____
Mixed 88
No response 99

A10. Have you consumed alcoholic beverages recently? How frequently do you drink in general? (Interviewer, read the options, only one answer)
Every day 1
At least, once a week 2
Less than once a week or never 3
Don't know 8

No response 9

A11. Some people have tasted various drugs. Have you ever done this? Which one? (Interviewer, read the list. For each drug use relevant option).

Drugs	Yes	No
1. Pills	1	2
2. Smoking	1	2
3. Injection	1	2
4. Inhalant	1	2
Don't know	8	
No response	9	

A12. Some people take vein injection drugs. Have you taken such over the last 12 months? (Do not count those taken for medical purposes.)

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

B. Marriage, Family and Work

B1. Have you ever been married?

Yes	1	***Continue***
No	2	***Go 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? (Don't read out the options. Match response with any of the options below)

Currently married, living with husband	1	***Continue***
Currently married, not living with a spouse. Living with another partner/lover/man	2	
Currently married, not living with a husband or partner	3	
Married, have both a husband and a lover/man	4	
Not married, but living with a partner/lover/man	5	***Go to B5***
Not married, not living with a partner/lover/man	6	
No response	9	
Other		

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

Yes 1
No 2
Don't know 8
No response 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	***Go to B8***
No response	9	

B7. What is this other work? Do you have another job? (Open ended question, may have several answers)

1. _____
2. _____
3. _____

B8. Do you have (financial) dependants (children, parents or other) now?

Yes	1	***Continue***
No	2	***Go to C1***
No response	9	

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

/_____/ (please specify 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 ho 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)*
C.2.2 Free of charge partners did you have? Partners that you did not charge money in exchange for sex, including husband, lover, permanent client) (*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:

	C2.1 Paying Clients	C2.2. Free of Charge Partners
Number		
Don't know	88	88
No response	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 and Q C3 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 you last client pay?

/_____/ (Please indicate the amount in lari)
Don't know: 88
No response: 99

D3. Did you use condoms with your last client?

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

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

My initiative	1	***Go to D6***
Partner's initiative	2	
Mutual initiative	3	
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	**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
Other	1	2
Don't know	88	
No response	99	

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
Nearly always - 2
Sometimes - 3
Never - 4
Don't know - 8
No response - 9

E. Commercial Sex Work History: Free of Charge Clients

E.1 Do you have a free of charge partner?

Yes	1	***Continue***
No	2	***Go to F1***

E2. Recall your very last free of charge partner *(lover/friend)*. About how many times did you have a sexual intercourse with him over the last 30 days (1 month)?

Up to 5 times - 1
5-10 times - 2
10-15 times - 3
15 and more - 4
Don't know/can't remember - 88
No response - 99

E3. When you had the last sexual intercourse with your free of charge partner, did you use a condom with him?

Yes	1	
No	2	***Go to E5***
Don't know	8	
No response	9	

E4. Who offered to use a condom? (Circle one coded response.)

My initiative	1	***Go to E6***
Partner's initiative	2	
Mutual initiative	3	
Don't know	8	
No response	9	

E5. Why didn't you and your 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
Other	1	2
Don't know	88	

No response	99

E.6 How frequently did you use condoms with your free of charge partner(s) over the last 12 months (1year)? (Interviewer, read the options to the respondent)

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

F. Women's and Men's Condoms

Note: Ask F1 only if the condoms are not used. (Compare with D3, D6, E3 and E6). Otherwise, go to F2.

F1. Have you *ever* used condoms with *any* of your partners?
(Please note that the respondent may not have used a condom in the cases described in Parts D and E, but has used it in other periods)

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

F2. Do you know of a person or place where you can get, or buy condoms?

Yes	1	***Continue***
No	2	***Go to F6***
No response	9	

F3. 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
Health Center	1	2
Hospital	1	2
"Tanadgoma"	1	2
Family planning center	1	2
Bar/hotel	1	2
Girls with whom you work	1	2
Other friend	1	2
Other	1	2
No response	99	

F4. 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?")

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

F5. How many condoms do you now have with you or at your place of work?

/_____/ (indicate the number of condoms)
No response 99

F6. During last year did any of your partners forced to have asexual contact with you against your wish?

Yes 1
No 2
No response 9

F7. During last year have you been the victim of any physical violence (beating, rape, etc.)?

Yes	1	***Continue***
No	2	***Go to G1***
No response	9	

F8. Who made violence against you?

	Yes	No
Client	1	2
Lover (man)	1	2
Husband	1	2
Pimp	1	2
Policeman	1	2
Stranger	1	2
Other	1	2
No response	9	

G. Sexually Transmitted Diseases

G1. Have you heard of diseases that are transmitted sexually?

Yes	1	***Continue***
No	2	***Go to G4***
No response	9	

G2.1 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?

D2.2 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?

	G2.1 Female Symptoms	G2.2 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
Other: ***(please specify)***	a)	a)
	b)	b)
	g)	g)
No response	99	99
Don't know	88	88

G4. Have you observed vaginal release during the last 12 months (1 year)?

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

G4. 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 H should be filled only for those respondent who have suffered vaginal release or ulcer/boil over the last 12 months. (Compare with G3 and G4). Otherwise go to Module I.

H. STD Treatment

H1. 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	DK	NR
1. Consulted or received a treatment at the state-owned health clinic or hospital?	1	2	8	9
2. Consulted or received a treatment at a private health clinic or hospital?	1	2	8	9
3. Consulted or received a treatment at a drugstore	1	2	8	9
4. Consulted or received a treatment from a traditional healer or a wise man\?	1	2	8	9
5. Applied a self-treatment?	1	2	8	9

6. Told to your sexual partner about your release or STD?	1	2	8	9
7. Stopped intercourses when the symptoms appeared?	1	2	8	9
8. Did you use the condoms during the symptom period?	1	2	8	9

I. Knowledge, Opinion, Attitude

I1. Have you heard of HIV or AIDS? (Please explain that HIV is a human immunodeficiency virus that causes AIDS. Make sure that the respondent understood what HIV is. You may use additional definitions too.)

Yes	1	
No	2	***Go to J1***
No response	9	

I2. Do you know any person who has been infected, ill with, or has died of AIDS?

Yes	1	***Continue***
No	2	***Go to I4***
Don't know	8	
No response	9	

I3. Do you have a close relative or friend who has been infected, ill with, or has died of AIDS?

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

I4. Please give me your opinion regarding the following:
(Please read out all options and circle the relevant answer.)

Assertions	**Yes**	**No**	**DK**	**NR**
1. Can one reduce the HIV risk if one properly uses condoms during every sexual contact?	1	2	8	9
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 having one uninfected and reliable sexual partner?	1	2	8	9
4. Do you believe that one can protect oneself from HIV/AIDS by keeping away from (avoiding) sexual contact?	1	2	8	9
5. Do you believe that one can get HIV/AIDS by taking food or drink that contains someone else's saliva?	1	2	8	9
6. Do you believe that one may be infected with HIV/AIDS by using a needle/syringe already used by someone else?	1	2	8	9
7. Do you believe that a person who looks healthy can be infected with HIV which causes AIDS?	1	2	8	9

I5. Do you believe that an HIV/AIDS-infected pregnant woman can transfer virus to fetus?

Yes	1	
No	2	***Go to I7***
Don't know	8	
No response	9	

I6. 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

I7. Can a mother transfer the HIV/AIDS to her baby through breastfeeding?

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

I8. Is it possible that women like you (FSW) 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 1
No 2
Don't know 8
No response 9

I9. I don't want to know about the test results but have you ever taken an HIV test?

Yes	1	
No	2	***Go to I13***
Don't know	8	
No response	9	

I10. Was it your initiative to take the HIV/AIDS test or you had to?

It was voluntary 1
I had to 2
No response 9

I11. Don't tell me the test result, but do you know it?

Yes 1
No 2
No response 9

I12. 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

I13. 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 STI/HIV?	1	2	8	9
2. If your relative man is infected with HIV would you like to take care of him at your place?	1	2	8	9
3. If a student is infected with HIV, but not diseased may he be permitted to continue studying?	1	2	8	9
4. If your relative woman is infected with HIV would you like to take care of her at your place?	1	2	8	9
5. If a teacher is infected, but not diseased with HIV may he be permitted to continue teaching at school?	1	2	8	9
6. If acquainted with you food salesman is infected with HIV, will you buy food from him/her?	1	2	8	9
7. If the member of your family is infected with HIV would you like it to keep this in secret?	1	2	8	9

J. Impact of the Infection Source (Optional)

J1. Has anybody informed you about STI/HIV?

Yes	1	***Continue***
No	2	***Go to J3***
Don't know/remember	8	

J2. If yes, won't you recall of a person who informed you about this, or how do you know about STD/HIV? (*open question, don't prompt)*

TV/Radio 1
Newspapers 2
Friends 3
Clients 4
Family members 5
Social workers 6
Other 7
No respond 9

J3. 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 answers given by the respondent)*

Condom use_____1
Avoiding sexual contacts_____2
Contact with one devoted partner_____3
Safe forms of sexual contact (masturbation, non-intercourse contact)_____4
Don't know_____8
No respond_____9

J4. 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

K. Media Communication

K1. Within the last 4 weeks how frequently did you listen to radio?
(Interviewer, read the options to the respondent. One response is quite acceptable)

K2. Within the last 4 weeks how frequently did you watch TV?
(Interviewer, read the options to the respondent. One response is quite acceptable)

	K1. Radio	**K2**. TV
Every Day	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?

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

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. Indifferent
3. Uninterested
4. Calm
5. Agitated

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_____