

2011

Condom Use among Sex Workers in Suriname

A study in Paramaribo and Albina



Acknowledgements

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Opinions expressed in this report are those of the authors and do not necessarily reflect the views of the UNFPA or other institutions the authors are affiliated with. The authors are responsible for all errors in translation and interpretation.

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Abbreviations

| | |
|-------------|---|
| AIDS | Acquired Immuno-deficiency Syndrome |
| ARV | Anti Retro Viral |
| BSRG | Policy plan Sexual and Reproductive Health (Beleidsplan Sexuele en Reproductieve Gezondheid) |
| BSS | Behavioral Surveillance Survey |
| CCP | Comprehensive Condom Programming |
| CBO | Community Based Organization |
| sex workers | Commercial Sex Worker |
| Derma | Dermatological Services |
| FBO | Faith Based Organization |
| HIV | Human Immunodeficiency Virus |
| GO | Governmental Organization |
| Ibid. | <i>Ibidem</i> (Latin), meaning: aforementioned, in the same place. The term is used to indicate that a citation comes from the same source as the previous. |
| MDG | Millennium Development Goal |
| MSM | Men having Sex with Men |
| NAP | National AIDS Program |
| NBCCS | New Beginnings Consulting and Counseling Services |
| NGO | Non Governmental Organization |
| NSP | National Strategic Plan on HIV/AIDS |
| OAS | Organization of American States |
| PAHO | Pan American Health Organization |
| PMTCT | Preventing Mother-to-Child Transmission (of HIV) |
| RGD | Regional Health Service (Regionale Gezondheidsdienst) |
| SMLA | Stichting (Foundation) Maxi Linder Association (now renamed as Foundation Rachab) |
| SRH | Sexual and Reproductive Health |
| STI | Sexually Transmitted Infection |
| UNAIDS | Joint United Nations Programme on HIV/AIDS |
| UNFPA | United Nations Population Fund |
| VCT | Voluntary Counseling and Testing |

Summary

Introduction: This report presents the results of a study on the access to, and consistent and correct use of, condoms among sex workers in Suriname, South America. This study is commissioned by the United Nations Population Fund (UNFPA) as part of its Comprehensive Condom Programming (CCP) initiative. The study objectives are to:

- Provide actionable evidence for social marketing decision making for sex workers;
- Identify levels and trends in behavior, risk, opportunity, ability, and motivation constructs.
- Determine which group and subgroup determinants affect decision to use condoms.

Methods: The research took place in November-December 2011 and focused on sex workers in the urban centers of Paramaribo and Albina, Suriname. The sample included sex workers belonging to different subgroups based on gender, working location, and nationality. Qualitative methods included qualitative interviews with sex workers; informal conversations with club, bar and salon owners; and observations. A quantitative survey was conducted with 228 sex workers among whom 177 women and 51 men. Limitations of the study are the absence of Chinese sex workers and the low number of Colombians in the sample, as well as the fact that random sampling was impossible.

Results: Surveyed sex workers were on average 29.8 years of age. In terms of educational achievement, most surveyed sex workers had some years of secondary education or completed secondary school. 46.1 Percent of sex workers had a steady partner and 70.6 supported one or more children and/or family members ($N_{\text{total}}=228$), with women supporting on average more dependents than men. The sample population of female sex workers is dominated by Surinamese (32.2%) and Dominicans (30.5%), followed by Guyanese (21.5%), Brazilians (14.7%), and two Colombians (1.1%) ($N=177$). Male sex workers were mostly Surinamese (66.7%) and Guyanese (29.4%; $N_{\text{total}}=51$). 91.5 Percent of female sex workers reported to only serve men, and 8.5 percent worked with men and women ($N_{\text{total}}=177$). Among male sex workers, 37.3% ($N=51$) reported having male and female clients. 79 Percent of the sex workers now working in Suriname ($N_{\text{total}}=227$) have no experience with sex work across the border of Suriname. Gender and nationality define where sex workers meet clients. Male sex workers are relatively more likely than their female colleagues to be walking the streets, whereas women more often work in a club, bar or massage salon. Suriname and Guyanese sex workers mostly walk the streets (resp. 61.5%; $N_{\text{total}}=91$ and 87.0%; $N_{\text{total}}=53$). Brazilian and Dominican women, by contrast, usually work in a club or massage salon (resp. 92.6%; $N_{\text{total}}=27$ and 89.1%; $N_{\text{total}}=55$).

Sex workers buy condoms mostly from the (Chinese) supermarket (37.7%) or pharmacy (14.5%) ($N_{\text{total}}=228$). Those who work indoors often get or buy condoms in the club, bar, or salon where they work (19.7%). 84.2 percent ($N=192$) of surveyed sex workers had received free condoms from Foundation Rachab/SMLA (17.5%), Derma (27.9%), Stg Lobi (13.2%), and other outreach

programs ($N_{\text{total}}=192$). Three-quarters of those who had received free condoms (75.2%) were of the opinion that the free condoms were perfectly fine. When buying condoms sex workers look for factors related to condom performance (strength, brand, material) rather than price.

79.5 Percent of sex workers reported that they had used a condom during their first commercial sexual experience ($N_{\text{total}}=226$). Among those sex workers who have commercial vaginal sex, all female sex workers (100%; $N_{\text{total}}=175$) and 95.0 percent of male sex workers ($N_{\text{total}}=20$) had used a condom the last time they had had vaginal sex. 95.7 Percent of sex workers among those performing oral sex with clients reported that they had used a condom the last time they had done so ($N_{\text{total}}=141$). Of those performing anal sex, 100 percent of women and 97.8 percent of men had used a condom during their most recent anal commercial sexual contact (Table 1). Female sex workers were more likely than their male colleagues to “always” have used condoms with clients in the month prior to the interview (91.5% versus 84%). Nationality and age affect consistent condom use; Suriname and Guyanese sex workers and relatively younger sex workers (<30 years of age) were relatively less likely than others to report that they had “always” used a condom with clients in the month preceding the interview. With a steady partner condom use is less consistent, especially for female CSW; 64.3% of male sex workers versus 28.0% of females reported that they “always” had used a condom with their steady partner in the past month. The observations that 19.2 percent of female sex workers ($N_{\text{total}}=172$) had been pregnant and that 9.7 percent ($N_{\text{total}}=217$) of surveyed sex workers had experienced an STI in the year preceding the interview, further suggest that condoms are not consistently used.

About one third (32.2%) of sex workers in our sample had experienced a problem with condoms in the month prior to the interview, primarily breakage ($N_{\text{total}}=227$). 43.7 Percent of surveyed sex workers reported that they “always” use water based lubricant to reduce the chances of condom rupture. Behaviors that increase the chances of condom failure include the use of two condoms on top of one another (27.5%; $N_{\text{total}}=225$) and the use of herbal steam baths to make the vaginal tight and dry (44.8%; $N_{\text{total}}=174$). 8.8 Percent of respondents had never received information about how to correctly put on a condom. The most common strategies after condom failure were: washing the genital area (32%), taking antibiotics (15.4%), taking an HIV test (4.4%), going to the doctor (3.9%), and using vaginal capsules or creams (3.1%) ($N_{\text{total}}=228$). Both behaviors that affect the chances of condom failure and strategies used after condom failure are strongly culture-dependent.

The study suggests that the use of alcohol and drugs affect condom use. Of the 79 sex workers do not consume alcohol during working hours, 94.9 percent reported that they had “always” used a condom with clients in the month prior to the interview. Among sex workers who drink

more than six glasses of alcohol while being at work, 82.1 percent ($N_{total}=37$) had “always” used condoms with clients ($N_{total}=39$). 81.1 Percent of marijuana users versus 93.2 percent of non-users ($N_{total}=190$) had “always” used a condom during sex with a client in the month prior to the interview. The study did not establish a relation between exposure to violence and condom use.

41.6 Percent of interviewees felt at risk of HIV infection ($N_{total}=226$), with relatively more women (48.3%; $N_{total}=176$) than men (18.0%; $N_{total}=50$) believing that they were at risk. The main reason to believe that one does not run a risk to become infected with HIV is that the person always uses a condom (67.4%; $N_{total}=129$). 95.1 Percent of surveyed sex workers named “using a condom” as the best way to prevent the sexual transmission of HIV when you are having sex ($N_{total}=225$). The three most common misconceptions are that one can get HIV from (a) a mosquito bite, (b) using the toilet after a person who is HIV+, and (c) sharing a meal with someone who is infected. These misconceptions were rejected by respectively 79.8 percent, 85.8 percent, and 95.6 percent of surveyed sex workers.

The data show that the majority of sex workers (51.6%; $N_{total}=227$) pay for medical expenses out of pocket, with Suriname sex workers being more likely than foreign sex workers to have private or public health insurance. The dermatological service is the best known place to obtain information about HIV/AIDS, to get an HIV test, and to obtain social and/or medical support for people who are HIV+.

The researchers conclude that sex workers are generally conscious about consistent condom use and generally have a good level of knowledge about HIV/AIDS. Like in the 2009 Behavioral Surveillance Survey among sex workers in Paramaribo, the present 2011 study finds a high rate of self-reported condom use during commercial sexual activity. There continue to be, however, various factors that reduce the likelihood of consistent condom use, including: sex with a steady partner, having oral sex, alcohol consumption, drugs use, possible allergic reactions to latex, and a need or desire for (more) money. Gender, age, nationality, and working location further mediate decision-making about consistent and correct condom use.

The researchers recommend that in order to be more efficient, outreach activities must take the cultural background of sex workers into account. Furthermore, outreach should not only promote condom use but also focus on behaviors that affect the correct use of condoms and on what to do when condoms fail. In addition, HIV-testing and counseling must bi-annually be provided in all locations where sex workers are active. Such outreach activities should involve the active participation of sex workers in program design and execution. The registration of clubs and massage salons that offer sexual services may allow for a greater control on sex work and efficiency of such outreach work.

Table 1 Indicators for condom use among sex workers

| Indicator | Numerator (%) | Denominator |
|--|---|------------------|
| Percentage of female sex workers who reported consistent condom use with clients in the past month (“always” used condoms) | 162 (91.5%) | 177 |
| Percentage of male sex workers who reported consistent condom use with clients in the past month | 42 (84%) | 50 |
| Percentage of female sex workers who reported consistent condom use with their steady partner(s) in the past month (“always” used condoms) | 23 (27.4%) | 84 |
| Percentage of male sex workers who reported consistent condom use with their steady partner(s) in the past month (“always” used condoms) | 9 (64.3%) | 14 |
| Percentage of female sex workers reporting the use of a condom with their most recent client with whom they had vaginal sex | 175 (100%) | 175 |
| Percentage of female sex workers reporting the use of a condom with their most recent client with whom they had oral sex | 97 (96.0%) | 101 |
| Percentage of female sex workers reporting the use of a condom with their most recent client with whom they had anal sex | 26 (100%) | 26 |
| Percentage of male sex workers reporting the use of a condom with their most recent client with whom they had vaginal sex | 19 (95%) | 20 |
| Percentage of male sex workers reporting the use of a condom with their most recent client with whom they had anal sex | 44 (97.8%) | 45 |
| Percentage of male sex workers reporting the use of a condom with their most recent client with whom they had oral sex | 38 (95.0%) | 40 |
| Percentage of sex workers who reported problems with the use of condoms in the past month | 73 (10.1%) | 227 |
| Percentage of sex workers who report consistently correct condom use, that is; they never wear two condoms on top of one another and the always use water-based lubricant. | 65 (28.6%) | 227 |
| Percentage of sex workers who identify using a condom as the best way to prevent the transmission of HIV when you are having sex | 214 (95.1%) | 225 |
| Percentage of female and male sex workers who both correctly identify using a condom as the best way of preventing the transmission of HIV and who reject three major misconceptions about HIV transmission. | Total: 155 (69.2%) Female: 110 (63.6%) Male: 45 (86.5%) | 224 173 51 |
| Percentage of sex workers who always correctly use condoms, that is, they both <u>always</u> use water-based lubricant and <u>never</u> wear two condoms on top of one another. | 29.4 % | 221 |
| Percentage of sex workers who report that they have received free condoms in the past year from an outreach program, their employer, or a clinic | 192 (84.2%) | 228 |

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1. Introduction

1.1 Study Aims and Objectives

This report presents the results of a study on access to, and the consistent and correct use of, condoms among Commercial Sex Workers (sex workers) in Suriname, South America. The study was commissioned by the United Nations Population Fund (UNFPA) as part of its Comprehensive Condom Programming (CCP) initiative. The goal of CCP is to develop strategies and programs through which every sexually active person at risk of HIV or other STI's, regardless of age, culture, economic situation, gender, marital status, religion, or sexual orientation, has access to good quality condoms when and where he or she needs them, is motivated to use them appropriately, and has the information and knowledge to use them consistently and correctly.

In Suriname, as in many other countries of the world, sex workers remain disproportionately affected by HIV and a source of HIV-transmission. There is strong evidence from laboratory and clinical studies showing that condoms are effective in reducing the risk of transmission of HIV and other sexually transmitted infections. Existing surveys among sex workers suggest, however, that not all sex workers consistently and correctly use condoms (Heemskerk and Uiterloo 2009; PAHO et al. 2009).

In planning for the execution of CCP, studies are conducted to obtain the necessary levels of information to complete all steps for comprehensive programming. As integral part of this planning phase, the primary aim of the present study is to provide empirical information on why and in which contexts sex workers do or do not use condoms, what problems exist with condom usage (e.g. rupture), and where and when sex workers are most likely to purchase or obtain condoms. Of particular interest is the identification of group and subgroup determinants that affect the decisions of sex workers to use condoms.

The study objectives are to:

- Provide actionable evidence for social marketing decision making for female and male sex workers;
- Identify the levels and trends evident in key behavior, risk, opportunity, ability, and motivation constructs.
- Determine which group and subgroup determinants have the greatest influence on the decision of FSWs and MSWs to use condoms.

The study results presented in the following pages provide necessary information for the strengthening and improvement of outreach programs for sex workers.

1.2 Background

In Suriname, estimated adult (15-49 years) sero-prevalence is 1% (Ministry of Health 2010). This figure is higher among Most At Risk populations (MARPs). MARPs are subgroups of the population whose specific behavior and/or conditions place them at increased risk of HIV infection. The Ministry of Health has identified various MARPs, including: Men having Sex with Men (MSM), male and female commercial sex workers, clients of sex workers, prisoners, and gold miners (ibid.). A 2009 sero-prevalence study among sex workers in Paramaribo found that seven percent tested positive for HIV, with male sex workers having much higher sero-prevalence rates than females (Heemskerk and Uiterloo 2009). Suriname has recognized the need and made a commitment to implement intensive surveillance on these MARPs. The present study contributes to these efforts.

sex workers work on the streets, in clubs and *cabarets* (gold mining areas), or from selected public establishments (bars, massage salons). Soliciting is prohibited by Surinamese law, and street-based sex workers are typically the poorest among sex workers. They also tend to work under unhygienic and often dangerous conditions, with less opportunity to negotiate condom use (CAREC/PAHO and Maxi Linder Foundation 2005). Street workers also are more likely than other sex workers to use drugs (Heemskerk and Uiterloo 2009), which may interfere with decisions about sexual behavior and condom use. The earlier mentioned sero-prevalence study among sex workers found that street workers (15.7% HIV+) were more at risk than sex workers working in clubs, bars, and salons (3.1 % HIV+), while sero-prevalence rates were lowest in the massage salons (0 % HIV+) and licensed clubs (1.1% HIV+). Since the early 2000s, young boys, transvestites and adult men are increasingly part of the Suriname sex industry.

In Suriname, club-based sex work is licensed under the condition that the sex workers in the club are registered at the Dermatology clinic and get checked bi-weekly for STIs. At this occasion, the sex workers also receive condoms and can obtain information about a variety of Sexual and Reproductive Health (SRH) issues. At present, only one Suriname club is registered. In the many clandestine clubs, sex workers are not being checked and sometimes work under deplorable conditions.

In 2009, a Behavioral Surveillance Survey was conducted among sex workers in Paramaribo. Important condom-related indicators that appeared from this 2009 study are presented in Table 2. This study found a high rate of self-reported condom use (Heemskerk and Uiterloo 2009). Ninety-six percent of sex workers claimed to always use condoms with clients. However, this figure did not concur with answers on questions about condom use during the most recent sexual encounters; especially during anal and oral sex condom use appeared less consistent. Mentioned reasons for not using a condom were that the sex workers made exceptions for

regular or well-known clients and ‘friends’, finding using a condom ‘unpleasant’, and being afraid to lose clients if insisting on using a condom. The study suggested that the drug use is an important factor in explaining inconsistent condom use. In addition, the surveyed sex workers never (57.4%) or only sometimes (9.7%) used a condom when having sex with their steady partner (ibid.). The fact that 19.5 percent of sex workers had their last child while being a sex worker and almost a quarter of female sex workers had been pregnant in the year prior to the interview, supported the impression that safe sex was not consistently practiced. This was also apparent from the fact that 6.8 percent of sex workers had experienced a Sexually Transmitted Infection (STI) in the year prior to the study. In the discussion session, these figures will be compared with the results from the present study in order to detect changes in condom use over the past two years.

Furthermore, Heemskerk and Uiterloo (2009) reported that virtually every sex worker (93.5%) had experienced that a condom had broken. In the present study, we also ask about problems with condoms, as well as about the actions taken by the sex workers when such occurs. In addition, we ask about behaviors that may increase or decrease the risk of condom rupture such as, respectively, the use of two condoms on top of one another and the use of water-based lubricant.

Table 2. Condom use indicators

| Indicator | % |
|---|-------|
| Percentage of sex workers who reported condom use the last time they had had vaginal sex (only those having vaginal sex) | 98.4% |
| Percentage of sex workers who reported condom use the last time they had had anal sex (only those having anal sex) | 87% |
| Percentage of sex workers who reported condom use the last time they had had oral sex (only those having oral sex) | 94% |
| Percentage of sex workers who report that they always use condoms with their clients | 96% |
| Percentage of sex workers who report that they always use condoms with their steady partner | 32.3% |
| Percentage of sex workers who correctly agree with the statement that having sex without a condom increases the risk of HIV infection | 97.7% |

Source: Heemskerk and Uiterloo 2009

The mentioned study further indicated that sex workers hardly actively made use of the free condoms that are available from various public locations. They mostly bought condoms at the Chinese supermarket, or else relied on the condoms that were distributed by the Maxi Linder Foundation (SMLA) in the streets or those supplied with the club and hotel rooms. In the present study, we similarly evaluate where sex workers get their condoms from. In addition, we analyze selection criteria of sex workers when they are buying condoms.

1.3 Study outline

In subsequent sections we will proceed as follows. Chapter 2 presents the methods used for data collection and analysis. This chapter also describes the study population and our sample. Chapter 3 contains the study results, which are organized according to thematic areas including the demographic and social profile of the study population; working conditions; buying and getting condoms; consistency of condom use; correct condom use; condom failure; knowledge of HIV/AIDS; sexual and reproductive health; and access to medical services, particularly those related to HIV/AIDS. The results are further analyzed in Chapter 4. Here we also place our findings in a broader context of findings from other studies on condom use among sex workers in Suriname and in other places. The final chapter 5 contains the conclusions and recommendations.

2. Methods

2.1 Study period and locations

Field work was conducted in November 2011 in two locations in Suriname: the capital city of Paramaribo, and the frontier town Albina. Figure 1 shows the two study locations in the country. Data analysis and report writing took place in the month of December, 2011.

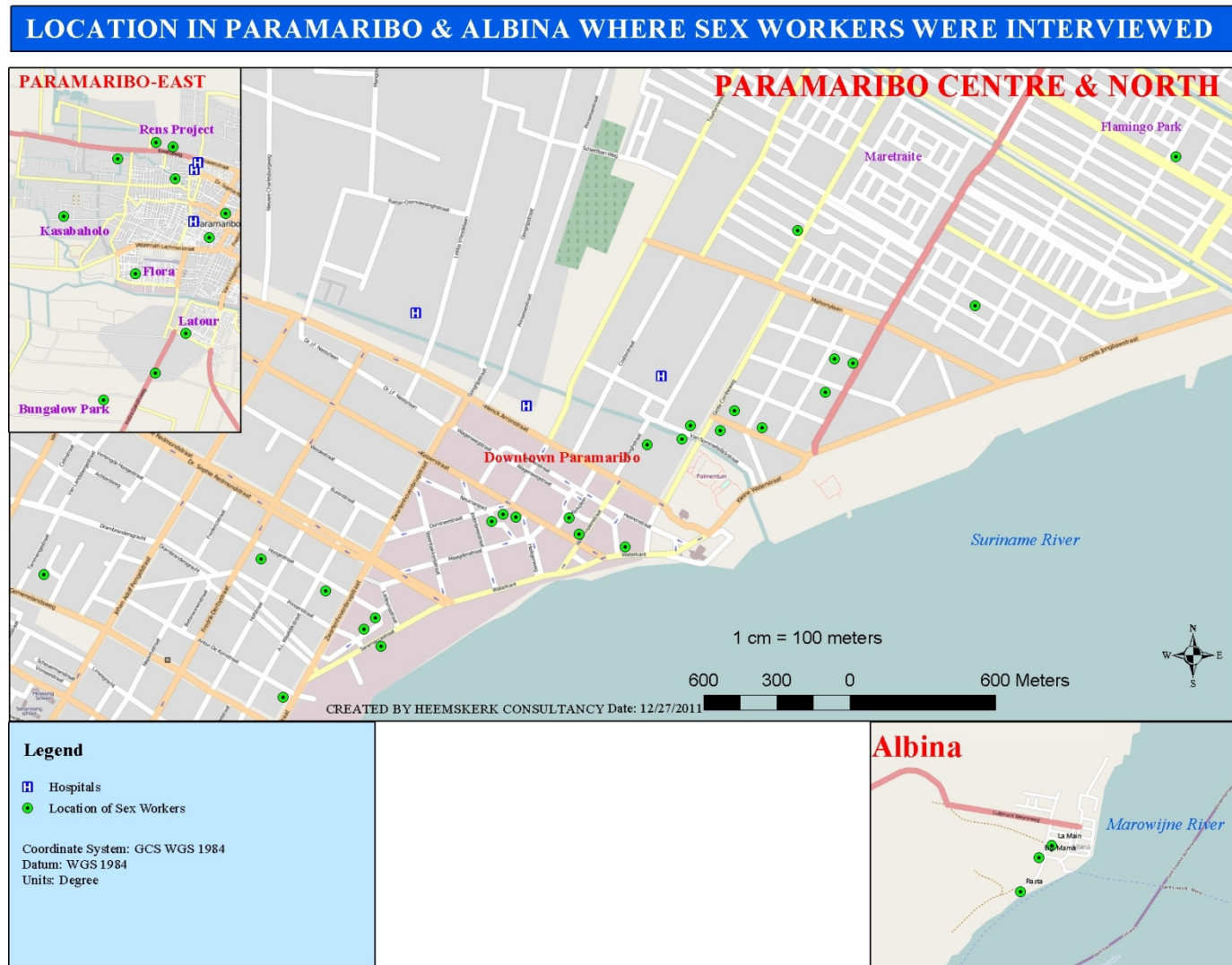
Figure 1. Suriname with the study locations Paramaribo and Albina



In Paramaribo, we conducted interviews with male and female sex workers in different types of localities, including outdoors (streets and squares), clubs where sex workers are living, clubs and bars where sex workers come to find clients, and massage saloons. Only one of the five clubs that were visited by the research team was officially registered. All other clubs were operating informally. In addition, sex workers who were part of the interviewers' social network were interviewed at their own homes or at an arranged spot. Figure 2 shows the distribution of interview locations in Paramaribo

In Albina, the research team visited three bars/clubs with female sex workers (Figure 2), none of which was registered with the government. In all places, the sex workers were living at their work location. Various consulted inhabitants of Albina named the same three locations, suggesting that that Albina hosted no other clubs with sex workers at the time of the visit.

Figure 2. Locations in Paramaribo and Albina where interviews were conducted



The researchers were informed that Brazilian sex workers typically do not work in Albina but only use this village as a transportation hub for travel between the capital city and the small-scale gold mining areas. Reportedly, Guyanese sex workers occasionally walk the streets in Albina, but during our tours of the possible sex work zones none were present. It is possible that festivities held at the time in French Guiana had motivated street workers to try their luck across the river.

2.2 Study population

Our study population consisted of all female, male, and transvestite commercial sex workers whose working area includes Paramaribo and/or Albina. We define as a sex workers any man or woman who involves in sexual acts against prior agreed upon payment in cash or kind with someone you have no further partner relationship with. Because this study is concerned about HIV/AIDS, we only included sex workers who have direct physical (oral, vaginal, or anal) sexual contact with their clients. We excluded go-go and lap dancers, and people who are paid to engage in live sexual performance, such as peep shows, web cam sex and phone sex.

The total number of sex workers in Suriname is not known, but may total about 2000 individuals (Heemskerk and Uiterloo 2009). These sex workers are both foreigners and local men and women, of different ethnic and cultural backgrounds. Their working conditions vary widely in terms of economic gains, power relations (e.g. power to negotiate safe sex; power to quit working if desired), personal safety, access to protection against Sexually Transmitted Infections (STI's), and other relevant factors. Based on our earlier studies, we distinguished as different sub-groups within the target population:

- Local sex workers walking the streets (tippelen)
- Foreign sex workers walking the streets
- Brazilian, Dominican, and other Latin women working in clubs, bars, and cabarets
- Local men and women working in clubs, bars, and cabarets
- Chinese women working in clubs
- Women working in massage salons
- Men and women working with an escort service

2.3 Sampling strategy and sample

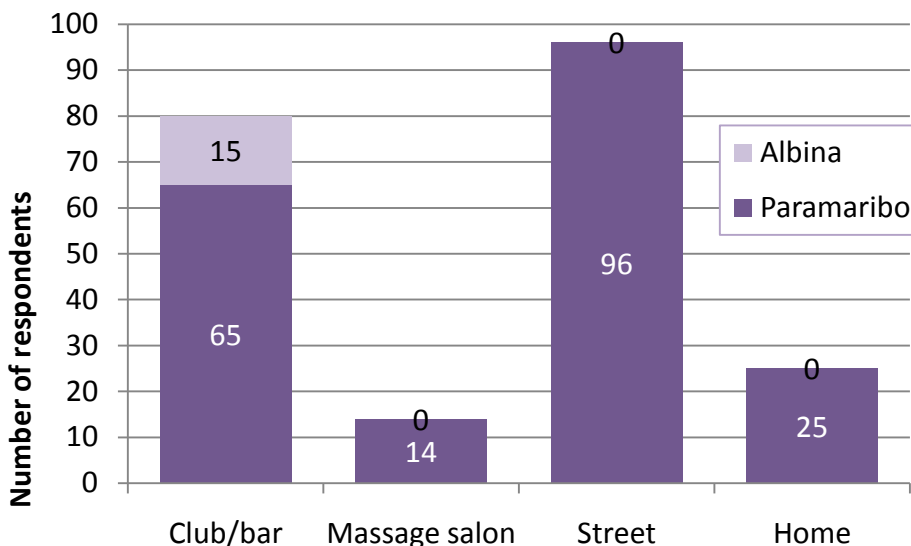
Taking a random sample of sex workers is impossible because sex workers and their working locations are not registered; their work is typically informal; and some sex workers may be inclined to hide their job. Our sampling design was developed to capture the diversity in sex workers experiences and included sex workers belonging to the various subgroups. The only subgroup we were not able to interview were the Chinese women. We were unable to set up

an appointment with the Chinese clubs and the research team was not allowed to enter one of the Chinese clubs spontaneously.

We surveyed a total of 229 sex workers. One case was removed from the data set because the woman had found a client at the time of the interview and not completed the survey. Hence the final sample that was used for analysis included 228 cases. This sample consisted of 177 (77.6 %) women and 51 (22.4%) men. In addition, we conducted qualitative interviews with four sex workers. In Albina, all interviewees were Dominican women working in bars/clubs. In addition, one qualitative interview was conducted with a female Dominican club-worker in Albina.

In Paramaribo, the sample displayed a larger diversity of Suriname, Guyanese, Brazilian, Colombian, and Dominican sex workers. In this place, the research team also was able to conduct interviews in a relatively wider variety of locations, such as clubs and bars of different styles, massage saloons, the street, and at the person's home or an agreed upon location. Just over one quarter (23.9%) of the Paramaribo interviewees were men ($N_{total}=213$). The majority of male sex workers were interviewed during working hours as they were walking the street (89.6%; $N_{total}=48$). Other men were interviewed at a club or bar (4.2 %; $N_{total}=48$) or at their own home or an agreed location (6.3%; $N_{total}=48$) (Figure 3). In Paramaribo, we conducted four qualitative interviews, among which one with a male sex workers.

Figure 3. Number of sex workers interviewed in different locations



2.4 Qualitative methods

During the preparatory phase of the research as well as during the survey work, the lead researchers made use of qualitative methods to develop a better understanding of the working conditions of sex workers as well as of the factors that guide decisions about condom use. The qualitative interviews were guided by open ended questions. These questions asked the interviewee about routes into Commercial Sex Work, about attitudes and opinions with regard to condom use, and about possible financial, social, physical, and emotional factors that might affect condom use. A draft interview guide was tested with two sex workers (one Guyanese and one Dominican), and adjusted to better reflect our objectives. The final interview guide is attached as Annex 1. Each participant for the qualitative interview received a USD 10- mobile phone card as compensation for his or her time.

In addition to the qualitative interviews with sex workers, the researchers had informal conversations with club owners and other stakeholders in the sex industry. These conversations served to obtain information about the (free) availability of condoms in clubs, about the number and type of sex workers working in specific locations, and about working conditions. Furthermore, the researchers recorded observations in the various places where sex workers were working. These observations concerned the number and type of sex workers and their working location.

2.5 Survey

A draft survey form was designed, based on the 2009 Behavioral Surveillance Survey (BSS) and on the specific demands of the UNFPA project on condom use among sex workers. This survey contained questions about general demographics, the consistency of condom use, correct ways of condom use, exposure to STIs, knowledge of HIV/AIDS, and knowledge and use of health services.

The draft survey was tested with five sex workers, among whom one Brazilian, two Dominicans, and two Guyanese women. These test interviews were excluded from the analysis. Based on this test, the survey questions were adjusted, some questions were deleted and others were added. One question that was deleted was linked to common HIV indicators. The question "Do you believe that having sex with only one faithful, uninfected partner reduces the risk of HIV transmission" was removed because this question does not make sense in the context of people who make a living by having sex with multiple partners. Moreover, the sex workers who participated in the test interviews argued that there is no way of knowing whether a partner is truly loyal to you, nor whether he/she is uninfected. We substituted this question for an open question to test more active knowledge of HIV prevention: "Other than using a condom, do you know other things you can do to reduce the chances of HIV infection?"

Another change to an HIV indicator question concerned the question: “Do you believe that using condoms reduces the risk of HIV transmission?” Asked like this, the question does not measure active knowledge of HIV prevention and hence we changed this question into the open question: “What is the best way of preventing the sexual transmission of HIV when you are having sex?”

The final survey form is attached as Annex 2. Each survey participant received a USD 10- mobile phone card as compensation for his or her time.

2.6 Protection of Human Subjects and Ethical Review

Research procedures adhered to professional ethical standards. Prior to conducting a qualitative or survey interview, the interviewee was approached in an unobtrusive manner. The surveyor introduced him or herself and explained the purpose of the research. The interviewee was also explained that participation in the research was voluntary and anonymous, and that the person would be compensated for his or her time with a USD 10- mobile phone card.

For neither the qualitative interviews nor the survey interviews, person names have been recorded. All person names used in this report are fictive. The answers have been processed using a coding system that guarantees respondent anonymity. Information provided by the sex workers to the survey team has been treated confidentially and not revealed in a way that can be linked to their person. All data has been presented in an aggravated manner.

2.7 Data analysis

Survey data were entered in an excel spreadsheet and next transferred to the statistical software package SPSS. The data were cleaned and cross-checked during sample analysis. Summary statistics and multivariate statistics have been used to present the data. In the data representation, the denominators for the various results are reported as N_{total} .

Information from the qualitative interviews, informal conversations and observations has been integrated with the quantitative data to provide a more in-depth understanding of group and subgroup determinants that have the greatest influence on FSW’s decision to use condoms.

2.8 Research team

The research team was headed by two anthropologists and one public health and mapping specialist. The lead researchers jointly designed the work plan and had final responsibility for execution of the research. Together the researchers are fluent in Dutch, English, Spanish, Portuguese, and Sranantongo.

During the field research, the lead researchers relied on the assistance of ten survey assistants, who were selected on the basis of their previous experiences with similar survey work; their language skills; and/or their familiarity with the research localities. The survey assistants

formed sub-groups to visit the various survey sites, based on their knowledge of these locations and their language skills. A data entry assistant was hired for entry of the survey data and processing of the qualitative interviews.

2.9 Limitations and assumptions

This study incorporates various limitations.

- **Sampling.** As explained earlier, it was not possible to take a random sample of sex workers in Paramaribo¹. sex workers are not registered and they are mobile; moving both within Suriname between the city and the mining areas and between Suriname and other countries. Furthermore, many sex workers work irregularly, based on needs of money, holidays and other circumstances. Because sex workers were interviewed ‘upon encounter’ in target locations, the results cannot be extrapolated to the population at large.
- **Chinese sex workers.** It remains difficult to get in touch with the owners of Chinese clubs or with the Chinese club workers themselves. Because of their relative isolation in Suriname society it is possible that particularly Chinese sex workers do not have sufficient access to information and other necessities to practice safe sex.
- **Colombian sex workers.** Colombian sex workers were rarely working in Paramaribo and Albina at the time of the research and as a result, the final sample includes only two Colombian sex workers. For this reason any analysis where nationality is one of the independent variables will not find relevant or representative results for the subgroup of Colombian sex workers in Suriname. The research team was informed that one of the clubs that is currently closed will reopen with Colombian women.

In collecting data and interpreting the results, we rely on various assumptions.

- **Representativeness.** The researchers assume that by targeting sex workers of different subgroups, the study provides a fairly accurate representation of the sex workers population, their habits, their opinions and their attitudes.
- **Reliability.** We also assume that interviewees answered to the questions to their best ability and in a truthful manner.
- **Doubles.** It is possible that the reward of a USD10- phone card motivated certain interviewees to get interviewed twice to receive a double award. Especially since different surveyors worked in the streets, it is not impossible that street worker answered twice to the same questions. Given that we have not encountered same person code twice, and given that also the demographic data do not reveal doubles, we assume that our data set does not include doubles.

¹ In Albina we interviewed all CSW that were o=present according to our information; hence we had a 100% sample.

3. Results

3.1 Demographic and social profile

The sample included sex workers in a wide range of ages. The youngest person interviewed was 17 years of age, and the oldest was 51. Interview respondents were on average 29.8 years old (SD=6.9); the median age was 29 ($N_{\text{total}}=228$). The large majority of sex workers in our sample (74.6%) are women, with a mean age of 30.7 ($N_{\text{total}}=177$). The mean age of interviewed male sex workers is 26.7 ($N_{\text{total}}=51$). The female sex workers we interviewed in Albina varied in age between 29 and 42 with a mean age of 35.1 ($N_{\text{total}}=15$). In Paramaribo the mean age of male and female sex workers was significantly lower, 30.3 (t-test, $p<0.001$) ($N_{\text{total}}=162$).

The mean age of having paid sex for the first time is 21.4 years ($N_{\text{total}}=228$). We found a wide range of ages for first commercial sexual activity though. The earliest paid sexual experience reportedly took place at an age of 10. On the other hand, five people reported to have had their first paid sex experience when they were already in their forties; the oldest being 45.

Surinamese sex workers were the youngest when they had paid sex for the first time, with a mean age of 18.1 years old ($N_{\text{total}}=91$), Dominicans were on average the oldest with a mean age of 27.4 ($N_{\text{total}}=55$). Respondents were asked whether they had used a condom the first time they had been paid to have sex. Four out of every five sex workers reported that they had used a condom during their first commercial sexual experience (79.5%; $N_{\text{total}}=226$). The data suggest that consciousness of condom use has risen in the past couple of years. Among sex workers who have been in business for more than five years, 29.5 percent had not used a condom during their first sexual experience ($N_{\text{total}}=139$). Among sex workers who more recently entered the sex business (five years or less), 'only' 5.7 percent had not used a condom during this first commercial sexual experience ($N_{\text{total}}=87$). Brazilians were most active in using a condom this first time they had paid sex. Ninety-three percent of Brazilians (92.6%; $N_{\text{total}}=27$) had used a condom during this experience, as compared to 64.8% of the Surinamese sex workers.

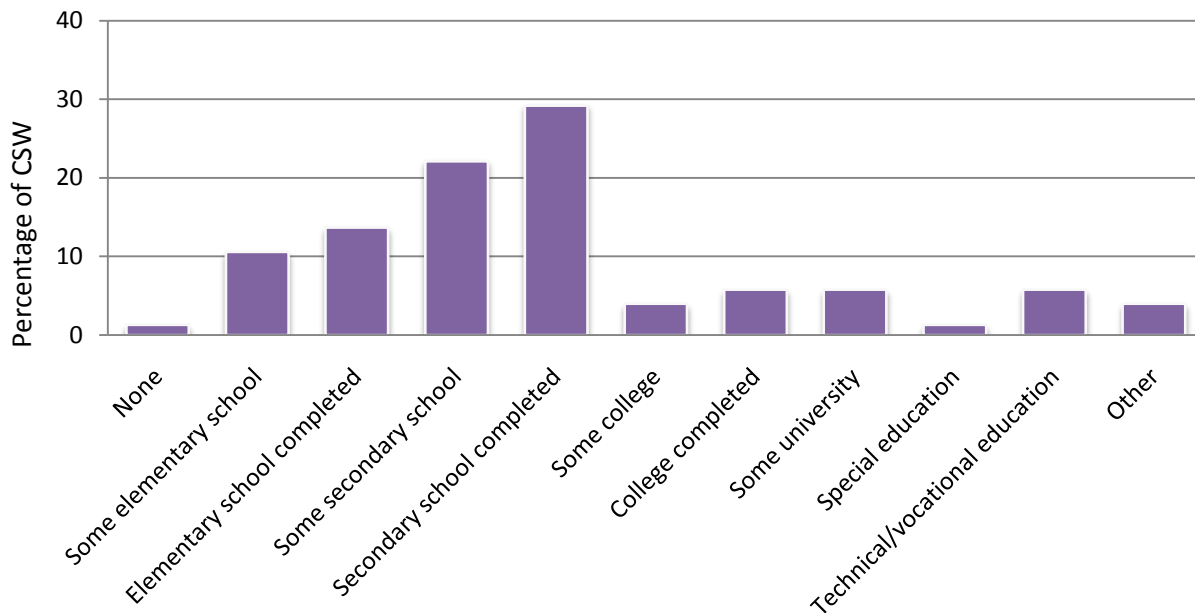
An earlier research among sex workers in Paramaribo (Heemskerk and Uiterloo 2009) found that street workers (mean age=33.6) were, on average, older than sex workers working in clubs, bars, and massage salons (Mean age=28.9=). This finding was coherent with the observation that club owners preferred young women in the clubs as those tend to attract more clients. The current sample shows not much difference in the ages of sex workers related to the location where they find/meet their clients. Nevertheless, there are small differences in the age groups that solicit clients in specific places. Sex workers who apart from in the urban areas reported also work in a *cabaret* (brothel) in the gold mining areas (mean age=33.5, $N=11$) are, on average, older than other sex workers. Sex workers who find/meet clients by phone appointment (mean

age=27.4; N=34) and those who walk the streets (mean age=28.6; N=104) are, on average, slightly younger than other sex workers.

When looking at educational achievements, we find that very few sex workers (3 persons; 1.3%) have not received any education ($N_{total}=228$). A larger group (10.5%) had some years of elementary education, and 13.6% of sex workers had completed elementary school but not gone beyond. About 21.9% of sex workers had entered secondary education -the Suriname LBGO/MULO or a foreign equivalent- but failed to complete it. 5.7 Percent of sex workers went to college (HAVO/Atheneum) and completed. Very few people had followed special or technical education (Figure 4). On average, sex workers had received 8.9 years of formal education, that is, less than three years beyond elementary school but too little to obtain a high school certificate.

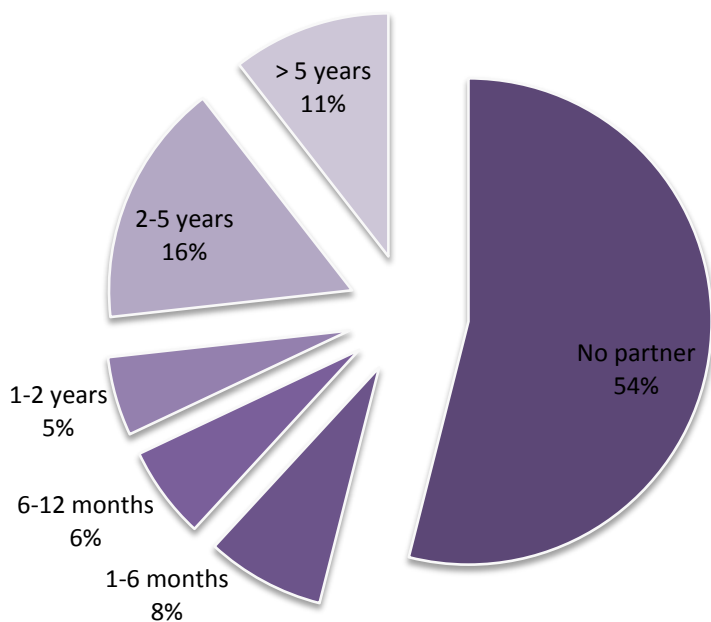
There is not much difference in educational achievement between women and men in the sample. Close to half of male and female sex workers completed secondary school (respectively 45.1%; $N_{total}=51$ versus 44.1%; $N_{total}=177$). There is no relation between educational levels and working location (e.g. street versus club workers).

Figure 4. Level of education



46.1 Percent of the sex workers have a steady partner ($N_{total}=228$). For some (7.9%) this relationship is rather young (1-6 months) but others have been in a stable relationship since two to five years (16.2%) or even more than five years (10.5%) (Figure 5). Even though the grand majority of sex workers in a relationship have no other non-paying partner (77.1 %; $N_{total}=105$), some people with a steady relationship reported having one (6.7%), or more than one (11.4%) non-paying partners ($N=10$).

Figure 5. Share of sex workers in partnership relations, with their duration



Most sex workers support one or more children and/or family members (70.6%, $N=228$). 60 percent of the Dominicans ($N=55$) support four or more children and/or family members. This is a high number in comparison to Surinamese sex workers, among whom 50.5 percent do not support any children and/or family members. The data suggest that there is a considerable difference between male and female sex workers with regard to the number of children and other family members they are supporting with their wages. On average, male sex workers support 0.4 children and/or family members while female sex workers support, on average, 2.9 dependents (respectively $N_{total}=51$ and $N_{total}=177$). Among Surinamese sex workers, male respondents supported on average only 0.1 children and/or family members ($N_{total}=34$). In comparison, female sex workers used their incomes to sustain an average of 2 children and/or family members ($N_{total}=57$).

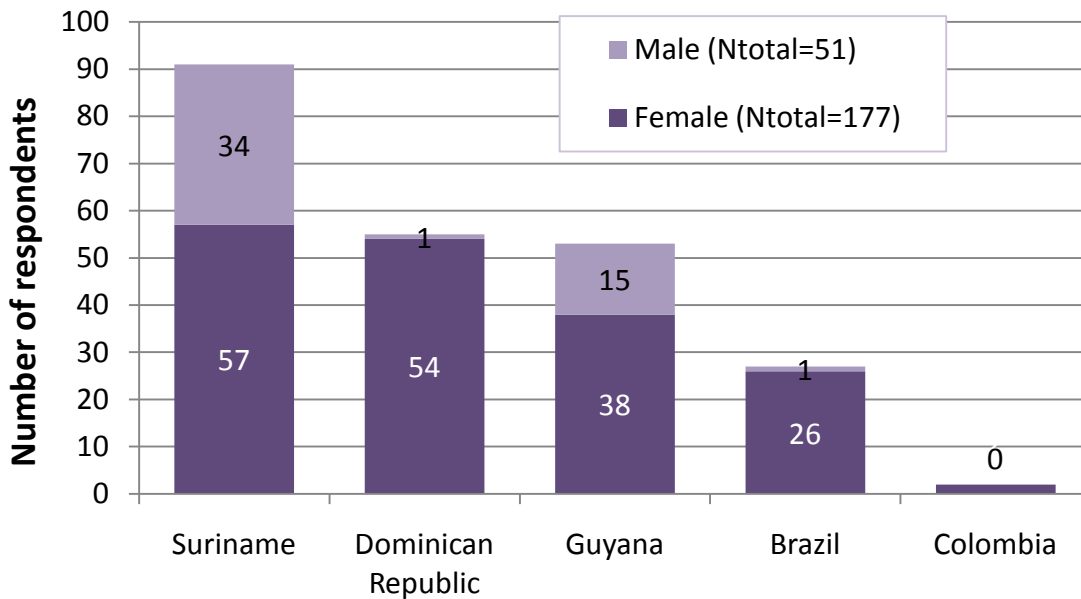
The sample population of female sex workers is dominated by Surinamese (32.2%) and Dominicans (30.5%), followed by Guyanese (21.4%), Brazilians (14.7%), and two Colombians (1.1%) ($N_{total}=177$). In Albina we interviewed fifteen Dominican women and no male sex workers at all (see section 2.1). Two-thirds of the male sex workers is Surinamese (66.7%), others are Guyanese (29.4%), one Brazilian (2%) and one Dominican (2%; $N_{total}=51$) (Figure 6). Based on our observations and qualitative interviews with club owners and others in the commercial sex business, we believe that the division of nationalities in our sample is fairly representative for the commercial sex workers population in Paramaribo and Albina at large. In qualitative interviews, migrant sex workers said that they had left their home country because of poverty. They either had no work or the work they did paid poorly (Box 1).

Box 1.

The Guyanese Daisy (age 45) was 22 when she first came to Suriname to look for money. In Guyana she was unemployed and she had heard that she could work in Suriname as a sex worker. As a street worker, Daisy may get up to 10 clients on a good weekend night, but there also are times that she does not find anyone the entire night. The client pays SRD 50 (USD 15-) for a short time (15 min.) plus the room. She typically uses the condoms that are distributed in the streets by outreach workers (white butterfly) or else she buys condoms at the short-stay hotel. She never uses the condoms of clients. Clients often ask for sex without a condom but she does not allow it. If the man continues to insist on having sex without a condom, she just returns the money and he will have to leave.

In terms of ethnicity, most sex workers identified themselves as Creole (43%) or of mixed ethnic background (33.9%) ($N_{total}=228$) with not much difference between males and females. For Surinamese respondents the question about ethnic background was relatively easy to answer, because in Suriname many people identify culturally and religiously/spiritually with one particular ethnic group. Respondents from other countries were less comfortable with identification with a specific population group and had more problems answering this question. Most Brazilians (48.1%, $N_{total}=27$) and Dominicans (45.5%, $N_{total}=55$) considered themselves to be a mix. Most Guyanese (58.8%, $N_{total}=53$) identified themselves as Creole.

Figure 6. Sample population of sex workers by nationality and sex



3.2 Working conditions

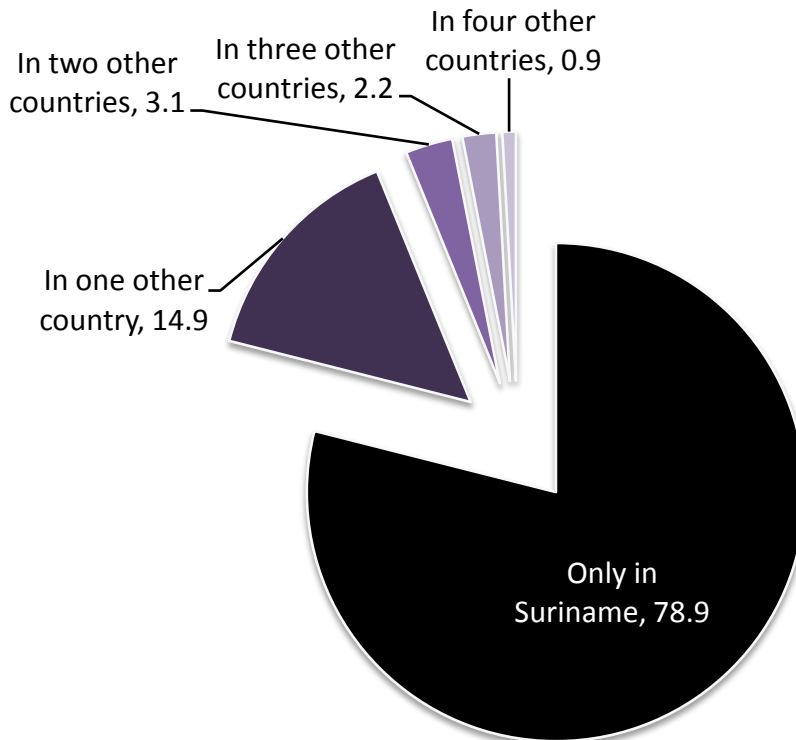
92.1 Percent of female sex workers report to be strictly servicing men, while 8.5 percent works with men and women ($N_{total}=177$). In qualitative interviews it was explained that women who service both women and men typically work with couples. We have not heard about female sex workers who provide sexual services to (lesbian or bi-sexual) women by themselves. The data suggest that 19 out of 51 men reported to have had paid sex with both men and women (37.3%; $N=51$)². This result is contradicted by information from qualitative interviews, which convey that male sex workers only rarely have sex with a female client. No-one reported serving exclusively women.

Most of the sex workers, 79 percent ($N_{total}=227$), have no experience with commercial sex work across the border of Suriname, not even in their home country (Figure 7). 50.9 percent of the Guyanese ($N=53$) and 37% of the Brazilians ($N_{total}=27$) have been working in one or more other countries outside Suriname. For the Dominicans this is only 10.9 percent ($N_{total}=55$). As compared to foreign sex workers, Surinamese sex workers were least likely to have sex work

² This result related to men and their female clients is doubted by the researchers. According to key informants working in the sex industry, a small number of male sex workers works with couples but it is unlikely that this is the case for one third of male sex workers. It is possible that this question was misinterpreted and that respondents indicated that they had in some point of time had sex with a female client or partner. For example, key informants have reported that some male sex workers have a female partner at home with whom they have sex.

experience outside Suriname. Only four Suriname sex workers had been abroad to perform sex work (4.4%; $N_{total}=91$). sex workers who had working experience outside Suriname mostly had been active in the Caribbean region (Barbados, Antigua, St. Maarten, Trinidad, Guyana, French Guiana) but some also had worked as a sex workers in Europe (Netherlands, Spain, Portugal, Germany, Switzerland) and/or Latin America (Venezuela, Brazil).

Figure 7. Percentage of sex workers who work only in Suriname as compared to those who work in more countries

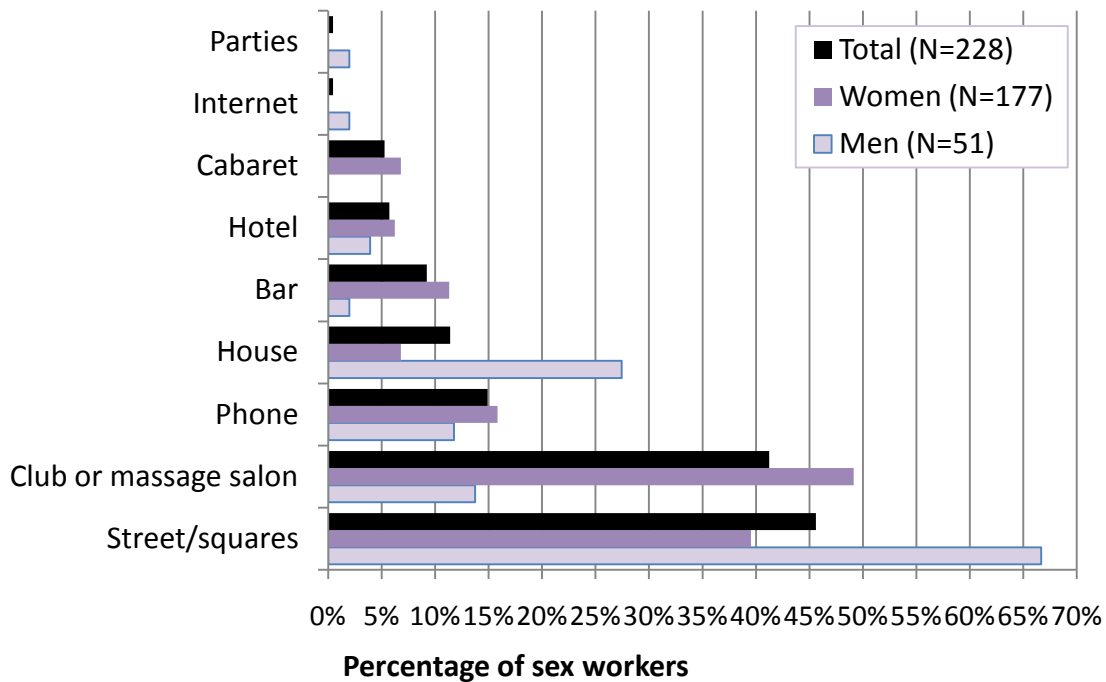


There are different locations where sex workers solicit clients, including streets and squares (outdoors), clubs, bars, massage salons, in a house, in a cabaret (brothel in the gold mining areas), or by phone appointment. The various subgroups of sex workers are not randomly distributed across these locations and we find that gender and nationality play an important role in defining where sex workers meet clients. For example, male sex workers are relatively more likely than their female colleagues to be walking the streets, whereas women are relatively more likely to work in a club, bar or massage salon (Figure 8). Eleven female sex workers indicated that they also worked in the cabarets in the gold fields (6.5%; $N=170$). In our response group there were no men who had worked in these places. One man reported that he found clients through the internet and another man solicited clients at parties. No single female sex workers mentioned these venues as sites to get into touch with clients.

The data also show that sex workers from certain countries are more or less likely to work in defined locations. For example, Suriname and Guyanese sex workers are relatively likely to walk the streets (resp. 61.5%; $N_{total}=91$ and 87.0%; $N_{total}=53$). Brazilian and Dominican women, by contrast, are hardly ever found soliciting clients in the streets (resp. 3.8%; $N_{total}=26$ and 1.9%; $N_{total}=54$). These latter women are most often working in a club or massage salon: 96.2 percent of Brazilian woman ($N=26$) and 75.9 percent of Dominican female sex workers ($N=54$) find their clients in these relatively upscale indoors places. From this sample, only Guyanese (3 women) and Dominican women (8 women) had travelled to the gold fields to work in the cabarets. No sex workers from the other nationality subgroups had visited the gold fields for work.

A hotel is for both male and female sex workers a common place to bring a client (respectively 45.1%; $N_{total}=51$ and 36.2%; $N_{total}=177$). Especially for the sex workers who find/meet their clients by phone appointment (64.7%; $N=34$) or at the street (54%; $N=104$) a hotel is the most frequently named place where people go to ($N_{total}=228$). These two groups bring their clients to a private home as well. Sex workers who find clients by phone appointment do this a little more often (32.4%; $N_{total}=34$) than sex workers who find their clients at the streets (28.8%; $N_{total}=104$). Sixty-eight percent of the sex workers who work in a bar, club or salon have sex in the establishment where they work ($N_{total}=104$).

Figure 8. Locations where male and female sex workers who work in Paramaribo and Albina solicit their clients*

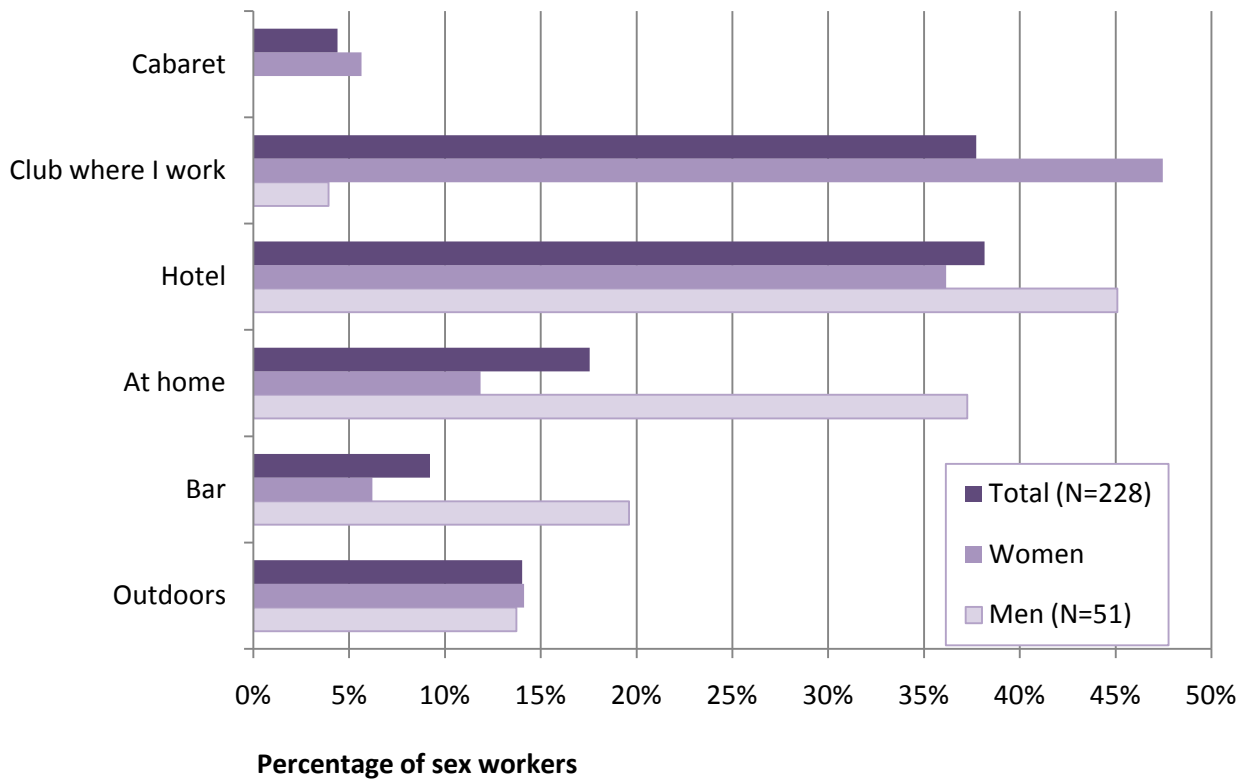


* The raw data for this figure are provided in annex 3

The data show salient gender differences in terms of the locations selected by sex workers to have sex. Only 11.9 percent ($N_{total}=177$) of the females has sex with clients at a private home, compared to 37.3 percent ($N_{total}=51$) of men. On the other hand, almost half of the female sex workers (47.5%; $N_{total}=177$) has sex in the club or salon where she works, versus only 3.9 percent of males ($N_{total}=51$; Figure 9).

88.9 Percent of the Brazilians ($N=27$) and 85.5 percent of the Dominicans ($N=55$) usually have sex in the club, bar or salon where they work. One third of the Brazilians (also) sometimes go to a hotel to have sex (33.3%; $N_{total}=27$). Surinamese and Guyanese are relatively more likely to have sex in a hotel; respectively 44% ($N_{total}=91$) and 60.4% ($N_{total}=53$) of sex workers from these countries report that they take their clients, among others, to a hotel.

Figure 9. Locations where male and female sex workers active in Paramaribo and Albina usually have sex with their clients*



* Raw data is provided in annex 3

3.3 Obtaining condoms

Sex workers obtain condoms from different localities. Those who buy condoms generally go to the (Chinese) supermarket (37.7%) or pharmacy (14.5%) ($N_{total}=228$) (Figure 10). In addition, many women who work in established clubs or massage salons usually get or buy condoms in the club, bar, or salon where they work (19.7%). Other sources from where sex workers obtain condoms are mostly places that distribute condoms for free.

We specifically asked about the receipt of any free condoms in the year preceding the interview. As compared to two years ago (Heemskerk and Uiterloo 2009) we notice a remarkable increase in the percentage of sex workers who had obtained condoms from free suppliers. In the past year (Dec. 2010-Nov. 2011), 84.2 percent of the present sample population had received condoms from one of the free suppliers or outreach programs, as compared to only 32.6 percent in 2009. Those who had received free condoms had gotten them from from Foundation Rachab (formerly SMLA; 17.5%), Derma (27.9%), Stg Lobi (13.2%), their employer or club owner (13.2%), the regional health services (RGD) and a new NGO named New Beginnings Consulting and Counseling Services (NBCCS) (Table 3; $N_{total}=192$).

Figure 10. Places from where sex workers usually get or buy their condoms ($N_{total}=228$)

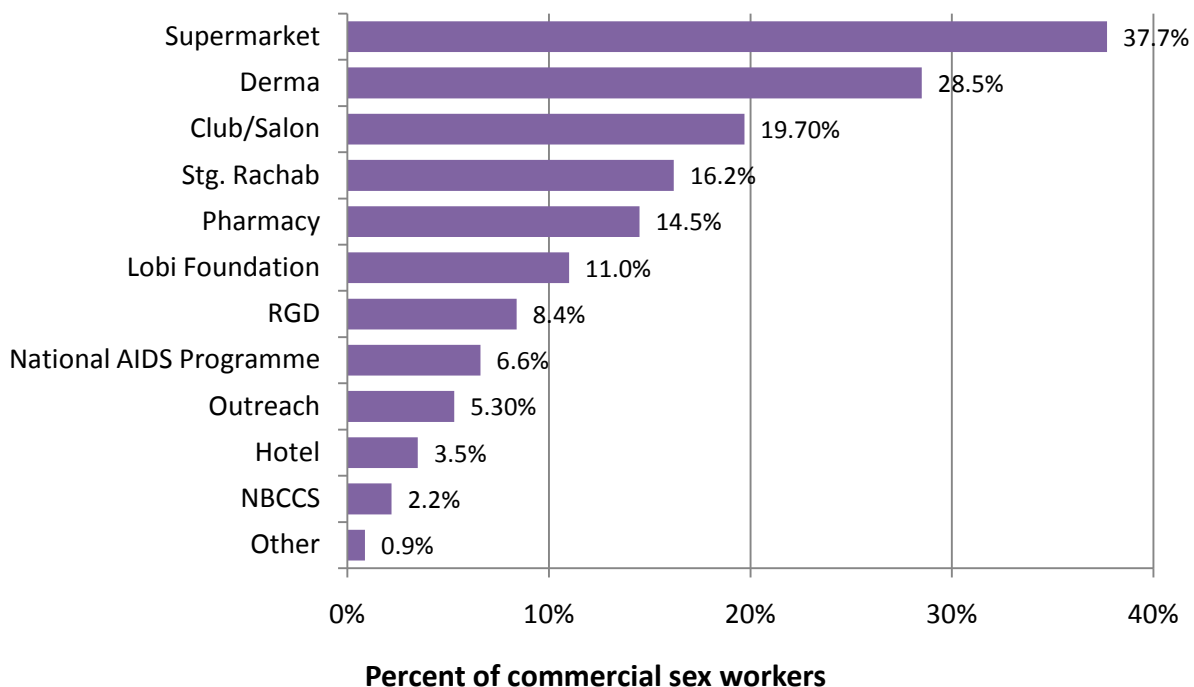


Table 3. Number and percentage of sex workers who received free condoms from specific places, institutions, and people in the year prior to the interview ($N_{total}= 192$)

| Source of free condoms | Frequency | Percentage |
|--|-----------|------------|
| Derma | 63 | 27.6% |
| Rachab (SMLA) | 40 | 17.5% |
| Stg Lobi | 30 | 13.2% |
| Club/bar/employer | 30 | 13.2% |
| RGD | 19 | 8.3% |
| NBCCS | 11 | 4.8% |
| NAP | 9 | 3.9% |
| Clinic (Brahma, Derma, Brazil) | 7 | 3.1% |
| Undefined organization | 7 | 3.1% |
| Unidentified people ("e.g. "white people, interns, "a girl") | 5 | 2.2% |
| Hospital Albina | 3 | 1.3% |
| General practitioner | 2 | 0.9% |
| In home country/abroad | 2 | 0.9% |
| Gay house | 1 | 0.4% |
| Pharmacie | 1 | 0.4% |
| Stg. Liefdevolle handen | 1 | 0.4% |
| Suriname Men United | 1 | 0.4% |

Three-quarters of the respondents (75.2%) appreciated these free condoms (Table 4). One of the sex workers who liked the free condoms said that “it does not make you dry, the quality is good and it doesn't have a strong taste when you are having oral sex.” Those who were not overly positive complained that the free condoms were too dry (7.9 %), too thin (4.5%), too tight (3.0%), too thick (2.0%), or had an unpleasant odor (3.5%). One sex worker was of the opinion that the free condoms break more rapidly than her preferred brand “Ola”. A colleague complained of itchiness when using the free condoms. A male sex worker said that because he has a large penis, the free condoms rupture easily.

In selecting what condom to buy, various criteria come into play. Half of the respondents said that strength is a main characteristic they look for in a condom (49.6%; $N_{total}=228$). The brand name -mentioned by 27.6 percent of respondents- and the material -named by 24.6 percent, are indirectly related to condom strength. Among the specific brand names used were “golden brand”, “durex”, “ola”, “night rider” and the type of condoms that the outreach programs are distributing. The respondents did not distinguish between the different types of condoms that are distributed for free; they generally could not provide a brand name and only knew that they come in white strips of three or four. One woman said that she would get skin irritations when

using certain (inferior) brands and hence she avoided these condoms. In addition, 3.5 percent of sex workers specifically check the expiration date.

Table 4. Opinions of sex workers (number and percentage) about the free condoms they had received from an outreach program, medical facility, or employer (N_{total}=202)

| | | |
|-----------------|-----|-------|
| Fine | 152 | 75.2% |
| Too Dry | 17 | 7.9% |
| Too thin | 9 | 4.5% |
| Unpleasant odor | 7 | 3.5% |
| Too Tight | 6 | 3.0% |
| Too Thick | 4 | 2.0% |
| Other opinion | 8 | 4% |

Price is not an important consideration when acquiring condoms (Box 2). Only 3.9 percent of respondents mentioned price as an interfering factor (N_{total}=228). Three individuals bought condoms because they had a habit to use a specific type (1.3%) and a same number reported that they looked for condoms with lubricant (1.3%; N=228). One sex worker said she selected condoms on the basis of taste and “romance”.

In the below and other qualitative interviews, sex workers indicated that they do not use the condoms of clients. They always use their own; either purchased or obtained for free from one of the outreach programs.

Box 2

Angela is a Dominican sex workers in her early forties, working in a club in the coastal town of Albina. She left her home and her seven daughters because she needed work and the jobs in Santo Domingo did not pay enough to sustain her family. Her clients, who come from Suriname and French Guiana, pay 100 SRD (30 USD) per 30 minutes, which is the going rate in town. Angela conveys that her clients know that they [the Dominican women in the club] only work with condoms and she has not been offered more money to have sex without. She buys her condoms in the pharmacy and does not select her condoms on the basis of price; “they have to be good and strong”. At the pharmacy she pays 15 SRD for a box of 100.

3.4 Consistency of condom use

Many people use condoms, but few people use condoms consistently. Sex workers were asked whether they had used a condom the last time they had had different forms of sex. Of the 197 sex workers who offered commercial vaginal sex 195 answered the question: “the last time you had vaginal sex with a client, did you use a condom?” Of these 195 sex workers, only one (male) sex workers responded that he had not used a condom the last time he had been paid to have vaginal sex (0.5%). Among those who had commercial vaginal sex, all female sex workers (100%; N_{total}=175) and 95.0 percent of male sex workers (N_{total}=20) had used a condom the last time they had had vaginal sex (Table 5).

Among the 147 sex workers who reported that they had oral sex with clients, two persons did not answer the question about whether they had used a condom the last time they had performed commercial oral sex. In addition, one person gave a nonsensical answer and three cases are missing. Of the 141 sex workers who answered this question, 95.7 percent said that they had used a condom the last time they had performed oral sex with a client. Two respondents indicated that they never used condoms during oral sex. One female sex workers said she would get allergic reactions to the latex when using a condom during oral sex. She explained that in the case of oral sex, she would wash the penis well and oil it.

Of the 71 sex workers who performed commercial anal sex and responded to the question about condom use during their latest anal sexual contact with a client, only one male sex worker reported that he had not used a condom (1.4%; N_{total}=71). All women who offered anal sex to clients said that they had used a condom the last time they had done so (Table 5). There is no significant difference between women and men in their self-reported condom use during the latest performance of oral or anal sex³ (Table 5).

Table 5. Percentages of women and men who report condom use during their latest vaginal, oral, or anal sexual contact with a client

| | Used condom during last sexual contact with a client | | |
|---------------|--|---------------------------------|--------------------------------|
| | vaginal sex | Oral sex | Anal sex |
| Men (N=51) | 95.0% (N _{total} =20) | 97.1% (N _{total} =35) | 97.8% (N _{total} =45) |
| Women (N=177) | 100% (N _{total} =175) | 95.3% (N _{total} =106) | 100% (N _{total} =26) |
| Total (N=228) | 99.5% (N _{total} =195) | 95.7% (N _{total} =141) | 98.6% (N _{total} =71) |

³ Chi-square tests were performed to establish statistical significance

Sex workers also were asked if, in the past month, they had always used condoms with clients and with a possible steady partner. When it comes to having sex with clients, 91.5 percent of female sex workers and 84.0 percent of male sex workers reported always using a condom (Table 6). The finding that male sex workers are less likely than female sex workers to always use condoms is consistent with the data about condom use during the latest sexual contact (Table 5). At least two persons who said that they “almost always” used condoms clarified that they only did not use condoms when having oral sex. Because we did not specify the form of sexual conduct in this question we cannot tell what share of the sex workers who do not “always” use condoms make their decision based on the type of sex they have. We only can conclude that for some sex workers, the type of sexual contact (vaginal, oral, or anal) is a factor that plays into the decision on whether or not to use a condom. One man responded that he never used a condom when having sex with clients.

Table 6. Answer to the question: "Have you consistently used condoms when having sex with clients during the month prior to this interview?"

| Used condoms for sex with clients | Always | Almost always | Sometimes | Never |
|-----------------------------------|--------|---------------|-----------|-------|
| Female (N _{total} =177) | 91.5% | 5.6% | 2.8% | 0.0% |
| Male (N _{total} =50) | 84.0% | 2.0 % | 12.0% | 2.0% |
| All (N _{total} =227) | 89.9% | 4.8% | 4.8% | 0.4% |

Suriname and Guyanese sex workers (respectively 85.7% and 84.4% reportedly had always used condoms with clients in the month prior to the interview) were less likely than sex workers from Brazil, the Dominican Republic, and Colombia to report that they had always used a condom with clients in the month preceding the interview (respectively 96%, 98.1% and 100%). This difference is partly due to the fact that all but one male sex workers in the sample are from Suriname and Guyana.

In addition to nationality and gender, age seems to be factor that affects whether or not a sex worker always uses condoms. This factor is largely independent from nationality (though Dominican women are, on average, older than all other groups) but related to gender, with male sex workers being, on average, younger than their female colleagues. The data demonstrate that sex workers up to an age of 30 are less likely than sex workers over the age of 30 to always have used a condom during sex with clients in the month prior to the interview (87.1%; N_{total}=140 versus 94.3%; N_{total}=84). A Chi-square test established no statistically significant difference between relatively older and younger sex workers with regard to the consistency of their condom use (Chi-square test).

As compared to all other age groups, sex workers in the age group 21-25 were least likely to consistently use condoms; only 81.4 percent of sex workers in these ages reported that they had always used condoms during commercial sex in the month prior to the interview (N_{total}=43). Qualitative data confirm that age and gender play a role in sexual risk behavior; women, and particularly older women with children, consistently emphasize that they cannot take the risk of becoming infected with HIV because they have to take care of their children.

In qualitative interviews, sex workers commented that clients often try to have sex without a condom. These clients are willing to pay double or even more. Most sex workers we talked to more in-depth said that they were not willing to have sex with clients without a condom, but one woman said she did in order to earn some extra money (Box 3).

Box 3

Christy⁴ (age 18) is a young Suriname woman who works in a massage salon in Paramaribo. Her clients pay 230 SRD for one hour of “massage extra”. Half of that money goes to the salon owner. The salon owner emphasizes that in his establishment all sex workers are obliged to use condoms but of course he does not know what happens inside the room. Christy admits that she sometimes does have sex with clients without a condom for double the price. She does not report this to the owner and hence this extra money is all hers.

When having sex with a steady partner, condom use is less consistent. Forty-two percent of surveyed sex workers with at least one steady non-paying partner responded that they never use condoms with their steady partner. Under a third of sex workers reported that in the past month⁵, they always used condoms with their steady partner (32.7%; N_{total}=98). A Guyanese confirmed in a qualitative interview that “love” was a reason to not use a condom.

The data suggest that male sex workers are more inclined than their female colleagues to “always” use condoms when having sex with a steady partner (respectively 64.3% versus 28.0%; Table 7). Conversely, male sex workers are less likely than female sex workers to “never” use condoms with their steady partner (respectively 21.4% versus 46.3%). One possible explanation may be that male sex workers were relatively more likely than female sex workers to have more than one ‘steady’ partner. When considering only sex workers with at least one steady non-

⁴ Fictive name

⁵ Several foreign CSW had a husband or boyfriend in their home country whom they had not seen in the month prior to the interview. In those cases, we asked about condom use during sexual contact in the most recent month that they had been with their steady partner

paying partner, half of surveyed men (50.0%; $N_{total}=14$) versus 11.8 percent of female sex workers ($N_{total}=85$) had sexual contacts with more than one non-paying partner.

Table 7. Answer to the question: "Have you consistently used condoms with your steady partner(s) during the month prior to this interview?"

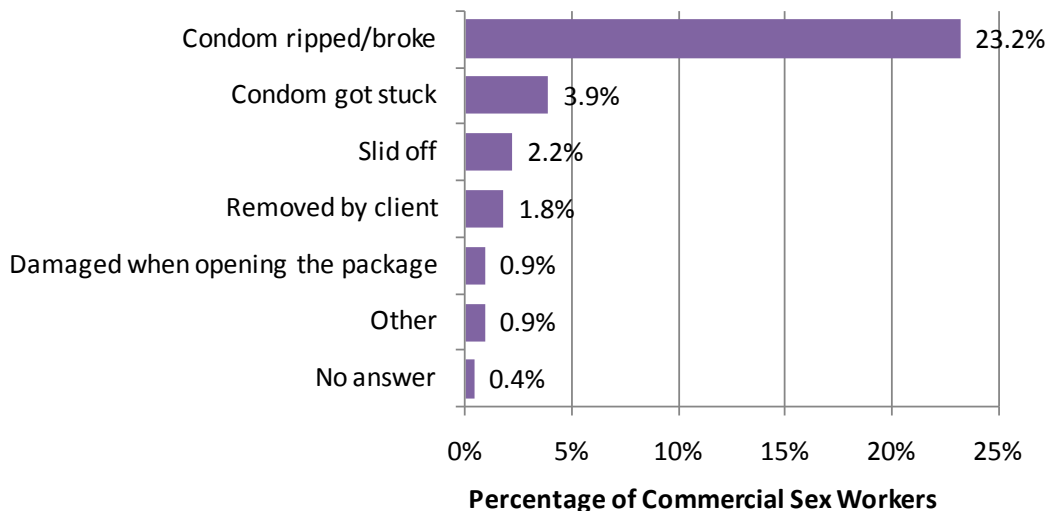
| Used condoms for sex with steady partner(s) | Always | Almost always | Sometimes | Never |
|---|--------|---------------|-----------|-------|
| Female ($N_{total}=82$)* | 28.0% | 4.9% | 20.7% | 46.3% |
| Male ($N_{total}=14$) | 64.3% | 0.0% | 14.3% | 21.4% |
| All ($N_{total}=96$)* | 33.3% | 4.2% | 19.8% | 42.7% |

* Excluding 2 cases of persons who responded "don't know"

3.5 Condom failure

Using a condom reduces the chances of HIV transmission, but condoms can fail. About one third (32.2%) of sex workers in our sample had experienced a problem with condoms in the month prior to the interview ($N_{total}=227$; Figure 11). The most common problem was that the condom had ripped or broken, which had occurred to 23.2 percent of surveyed sex workers in the month prior to the interview ($N_{total}=228$). Less common problems were that the condom had gotten stuck (3.9%), had slid off (2.2%), or had secretly been removed by the client (1.8%) ($N_{total}=228$)

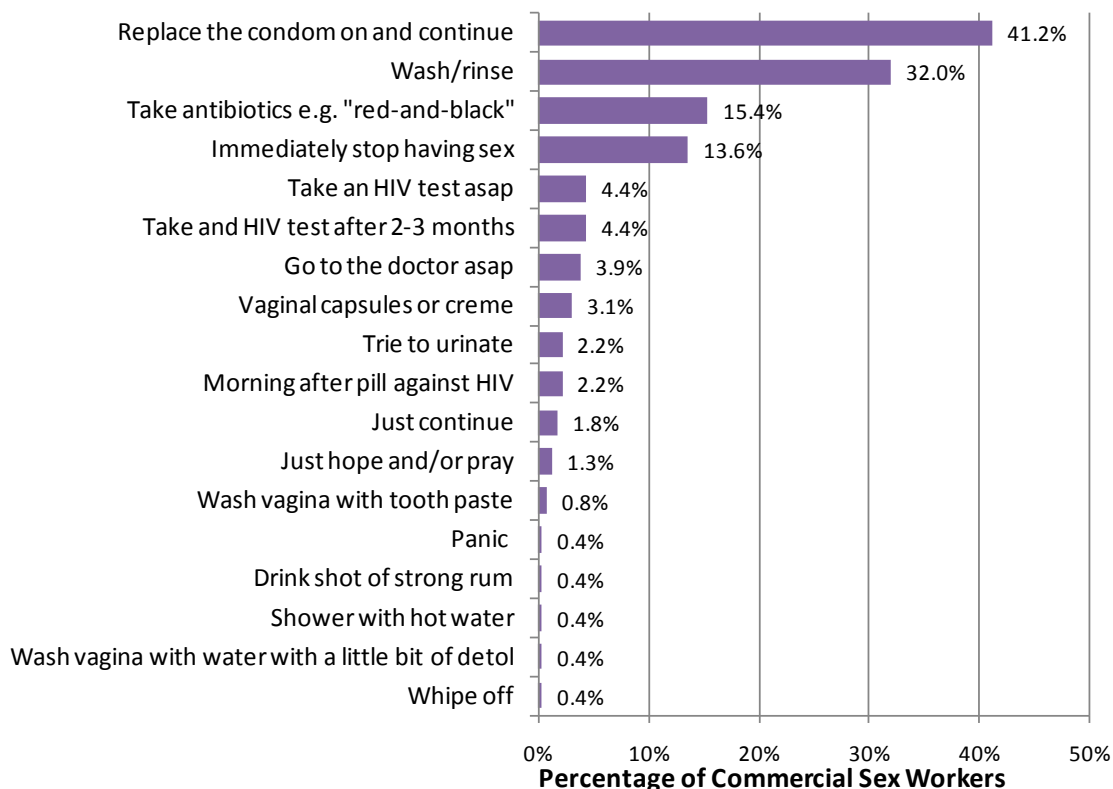
Figure 11. Percentages of sex workers who had experienced specific problems with condoms in the month prior to the survey ($N_{total}=228$)



Different reactions and strategies follow condom failure (Figure 12). Forty-one percent of sex workers mentioned that they would replace the condom and continue ($N_{total}=228$). Nearly one

third of interviewees responded that they would immediately wash and rinse their genital area (32%; $N_{total}=228$). Some would wash with special feminine washes such as *lemisol* or *lactacyd*, or a disinfectant soap (e.g. *dettol*). Other commonly used strategies to decrease the risk of pregnancy and/or STIs are taking antibiotics, taking an HIV test, going to the doctor, and the use of vaginal capsules or creams.

Figure 12. Reactions and actions following condom failure ($N_{total}=228$)



We find compelling differences between sex workers of different countries in the strategies used to mediate the possible consequences of condom failure. For example, the Suriname sex workers are the only subgroup where a majority (67%; $N_{total}=91$) reported to replace the condom and continue. Only Guyanese sex workers mentioned that they would hope and/or pray for the best after they experienced condom failure.

Thirty percent of Guyanese sex workers (30.2%; $N_{total}=53$) and 32.7 percent of Dominican sex workers ($N_{total}=55$) take oral antibiotics such as ampicillin when the condom fails. The Guyanese street workers call this medication “red-and-black”, referring the physical appearance of the pills (Figure 13). Only one Brazilian woman and none of the Suriname or Colombian sex workers reported taking antibiotics after condom failure.

Figure 13 "Red-and-black" (ampicillin) antibiotics used by Guyanese sex workers



Figure 14. Example of spermicidal suppositories or "ovules"



Seven Dominican women mentioned that after condom failure, they use vaginal cream or capsules (*ovulo*) that have to be vaginally inserted. Some used these vaginal products in combination with oral antibiotics. None of the sex workers from other countries reported the use of vaginal medication to decrease the chances of pregnancy and/or infection.

Because the interviewees did not provide much information on these capsules or creams, we cannot specify type of medication they use. It is possible that these sex workers use spermicidal tablets or suppositories as a contraceptive (Figure 14). Such vaginal capsules have to be inserted about 10 to 15 minutes prior to having sexual contact, and even then their reliability in preventing pregnancy is only about 65 to 80 percent. When inserted after ejaculation (e.g. after condom rupture) their effectiveness questionable.

It also is possible that women use vaginal creams, tablets or suppositories (some brands name them "ovules" for their oval shape) with antifungal and/or antibacterial substances, which are commonly used against dermatophytes and vaginal yeast infections (Vaginal candidiasis). None of these products provide any protection against pregnancy or STIs including HIV. In fact, because the creams are typically oil-based, they can damage the latex in the condom and hence increase the risk of condom rupture with a next client.

A female Guyanese street worker said she would take a shot of Palm - strong local rum. Two Dominican women reported that they washed their vagina with tooth paste. Brazilian women were, with one Guyanese woman, the only sex workers who reported that they had used the morning after pill against HIV infection.

None of the sex workers said that they took a morning after pill against pregnancy after condom failure. This is surprising because many women do not use any contraceptives other than the condom (see section 3.9), and a morning after pill would be more effective than any of the other remedies to reduce the chance of pregnancy.

In addition to nationality, gender is another factor that shapes reactions to condom failure. Male sex workers are twice as likely as females to replace the condom and continue after condom failure (respectively 70.6%; $N_{\text{total}}=51$ versus 32.8%; $N_{\text{total}}=177$). On the other hand, the data suggest that men are much less likely than women to take antibiotics, go to the doctor, or even wash/rinse after condom failure.

3.6 Conscious condom use

Even though every sexual encounter incorporates some risk, there are various things sex workers can do to decrease such risks. In addition to being used consistently, condoms also must be used correctly to be effective and protective. Incorrect use can lead to condom slippage or breakage, thus diminishing the protective effect. This means, among others, that the sex workers must (a) know how to put on the condom correctly; (b) use water-based lubricant (or lubricated condoms); (c) not place two condoms on top of one another; and (d) not use genital herbal washes or steam baths to make the vagina tight and dry.

Survey participants were asked whether they had ever received information about how to properly put on a condom. Twenty respondents (8.8%) answered that they had never received any information about how to do so ($N_{\text{total}}=228$). For example, one Guyanese woman said that because she did not want to touch the penis, she would stretch the condom widely around the penis and then let go of the condom. This application method allows for air to remain in the top segment of the condom and increases the chances of rupture.

The largest share of sex workers (53.5%) had obtained information about proper condom use from an outreach organization ($N_{\text{total}}=228$). Many sex workers could not mention the name of the organization but those who did referred to:

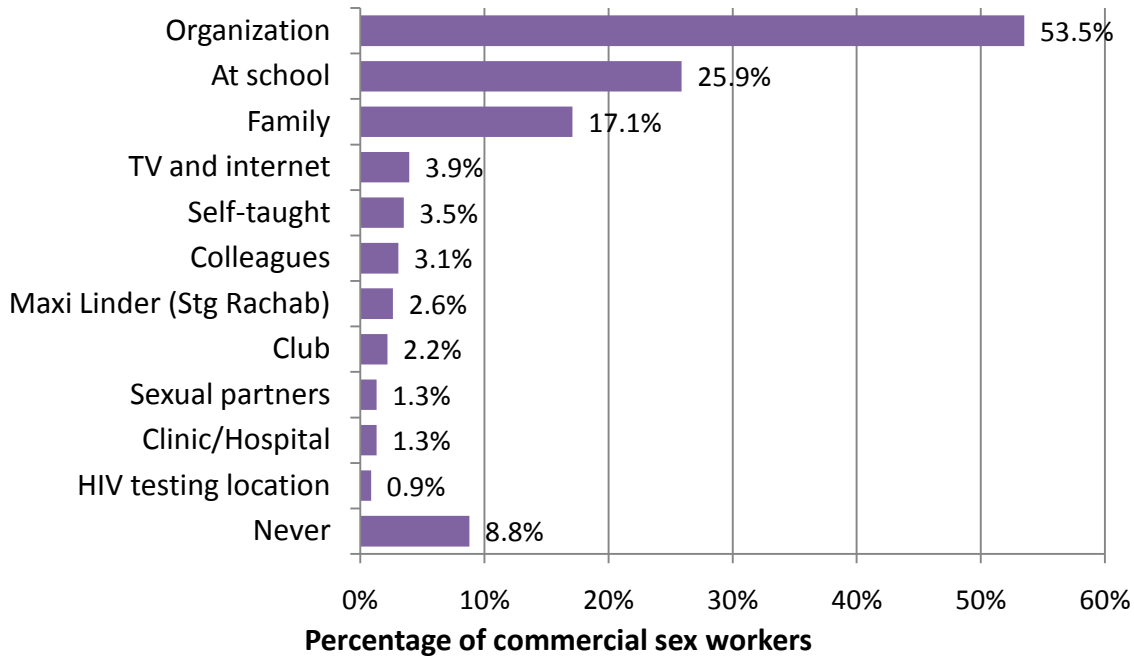
- Foundation Maxi Linder (now Foundation Rachab),
- the Lobi Foundation,
- Foundation New Beginnings (NBCCS),
- Comforting heart (Guyana)
- A place next to Burger King
- An organization in a home country or other country where they had worked.

Other important sources of information about proper condom use are the school (25.9%) and family (17.1%) ($N_{\text{total}}=228$). 3.9 Percent of sex workers reported that they had learned how to correctly put on a condom from TV or internet (Figure 15)

One of the massage salon owners told the researchers that he provides information on correct condom use as soon as he hears about an increase in condom rupture. On one occasion when a group of new Suriname indigenous women came in, he noticed an increase in the number

condom ruptures. Subsequently he took these women apart and provided a brief training on how to put on the condom correctly. Only 2.2 percent of sex workers in the sample said that they had obtained information about correct condom use in a sex club.

Figure 15. Places from where sex workers have received information about how to properly put on a condom



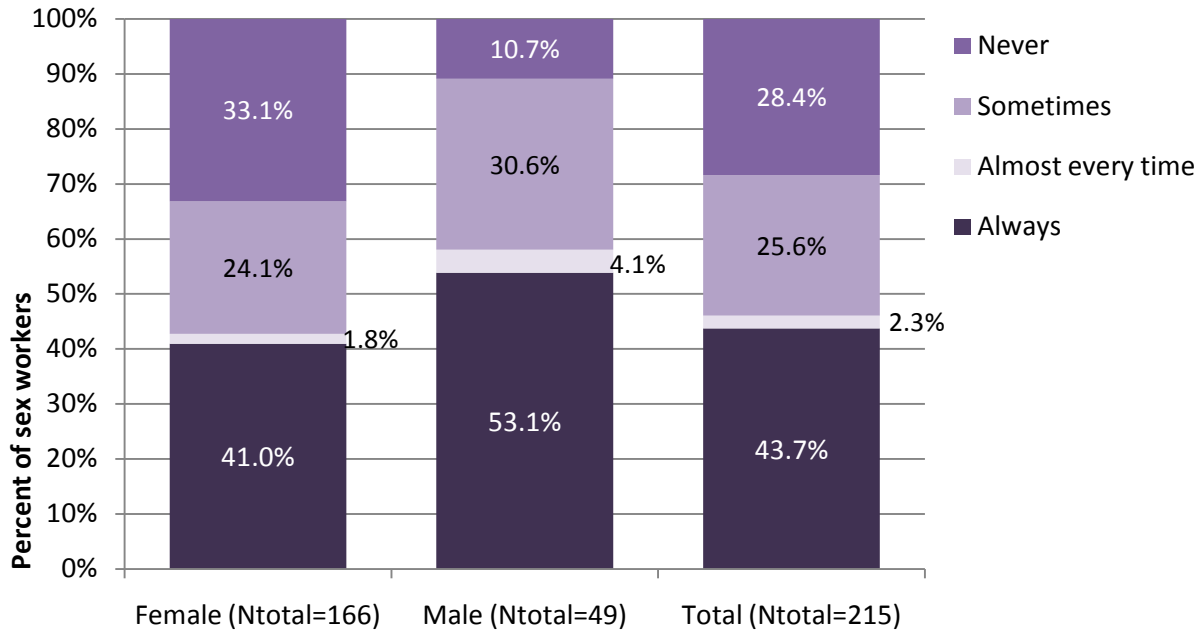
The use of water-based lubricant⁶ is fairly common among sex workers; 43.7 percent of surveyed sex workers report that they “always” use it ($N_{total}=215$). In addition, 2.3 percent of sex workers use it “almost every time” and 25.6 percent “sometimes” (Figure 16). The data suggest that men are more likely than women to “always”, “almost every time” or “sometimes” use water-based lubricant (Figure 15). Conversely, as compared to male sex workers, female sex workers more often reported that they “never” use lubricant. Some sex workers reported that they never use lubricant because they are allergic or it produces itchiness. Others argue that if they use lubricant they do not feel it if the condom breaks, and hence they prefer not to use it. On the other hand, some sex workers commented that now they were using lubricant (gel), they no longer experienced problems with condoms such as rupture.

Some sex workers use alternatives to water-based lubricants to reduce friction between condom and skin, such as saliva, oil based lubricants, baby oil, or vaginal gel or cream. Any

⁶ This includes both cases where the person uses a separate lubricant and where the person uses condoms that already have lubricant

product that contains oil should not be used because it may damage the latex of the condom. From qualitative interviews we learned that male sex workers use so-called “poppers”⁷ (amyl nitrate), which relax the anus muscles and makes anal sex more comfortable (Box 4). It is likely that the use of poppers also reduces friction of the skin with the condom when having anal sex and hence reduces the chances of rupture.

Figure 16. Percentages of male ($N_{total}=56$) and female ($N_{total}=161$) sex workers who “never”, “sometimes”, “almost every time”, or “always” use water-based lubricant ($N_{total}=217$).



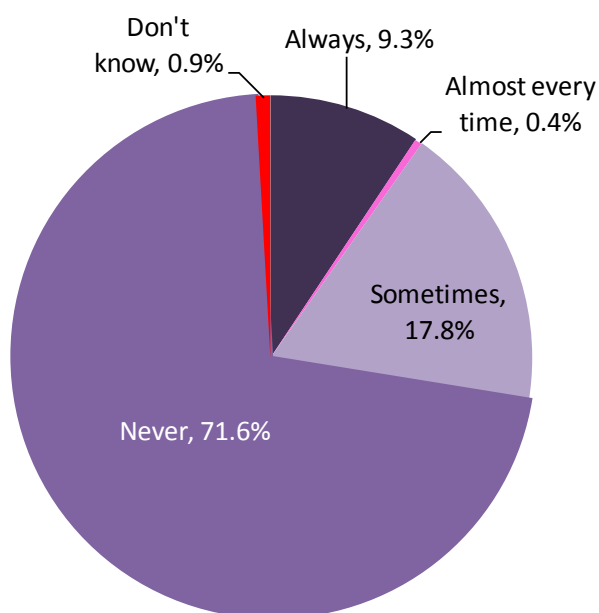
Box 4

Danny (age 31) works as a male sex workers in Paramaribo. He mostly works with the webcam but about twice a month he walks the streets and in addition he takes phone appointments. Clients pay him 100-150 SRD per hour. He has been offered 200 to 300 SRD to go without a condom but he does not dare to take the risk. Danny always has condoms with him. He gets Durex condoms from the Netherlands and uses the free condoms from outreach workers but never those of clients. In order to reduce the chances of condom rupture, Danny uses lubricant but he is not sure whether it is oil or water-based - this is not something he checks. In addition he sniffs poppers, which are sold for SRD 50- (USD 15)/piece, and sometimes glue to relax.

⁷ Refers to a small, usually brown bottle of solvents or the solvents themselves, which are sniffed.

The majority of sex workers know that they should not use two condoms on top of one another. Seventy-two percent of sex workers reported that they “never” work with two condoms placed on top of one another ($N_{total}=225$; Figure 17). Of the remaining respondents, 9.3 percent reported that they “always” use two condoms at a time; 0.4 percent does so “almost every time”; and yet another 17.8 percent “sometimes” uses two condoms at once. For example, one Suriname sex workers said that she does not initiate the use of two condoms at once, but she does place an additional condom when the client asks for it. Some women added that they were more prone to use two condoms at a time if the man had a larger penis and hence they were more afraid for condom rupture.

Figure 17. Percentages of respondents who “never”, “sometimes”, “almost every time”, or “always” use two condoms on top of one another ($N_{total}=225$).

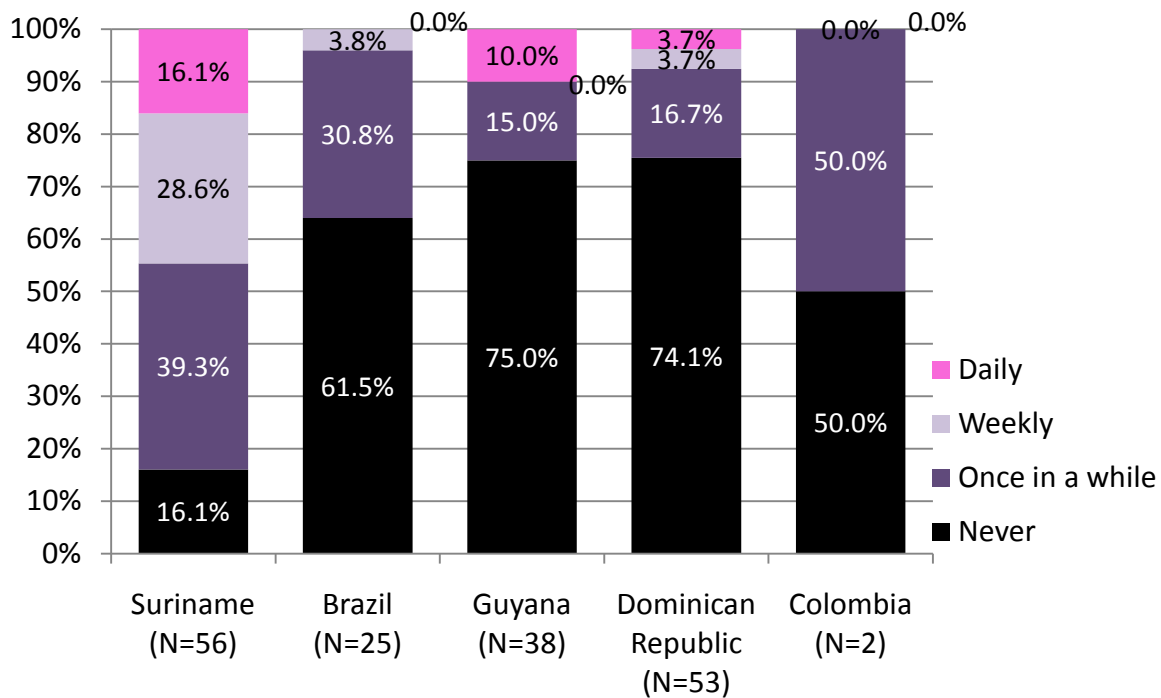


The data show salient differences between sex workers originating from different countries. As compared to sex workers from Colombia and Brazil, Dominican and Guyanese sex workers, and to a lesser extent sex workers from Suriname, are relatively more likely to “always” or “sometimes” use two condoms at a time.

An additional factor that might interfere with the safety of condom use is the use of genital herbal steam baths to make the vagina dry and tight. In Suriname, these washes are particularly popular among the Creole and Maroon populations. Studies in African countries and Suriname have demonstrated that “dry sex” damages the vaginal mucous membrane, which may cause small ruptures and infections in the vagina (Van Andel et al. 2008). The use of genital herbal steam baths also increases the risk of condom rupture.

Female sex workers were asked whether they used genital herbal steam baths to become dry and tight. The responses differ considerably between women from the different countries, with Suriname women being most likely to use genital steam baths (Figure 18). Sixteen percent of Suriname female sex workers reported that they daily wash their vagina with herbal remedies to remain tight and dry; 28.6 percent uses these baths weekly; and another 39.3 percent does this once in a while (N=56). By contrast, three quarters of Dominican and Guyanese women said that they never use herbs to make the vagina dry and tight (respectively 75.9%; N_{total}=54 and 75%; N_{total}=40). Women who use vaginal steam baths once in a while do so typically just after their menstruation.

Figure 18. Percentages of female sex workers who use herbal washes or steam baths to make the vagina tight and dry, by nationality (N=174)



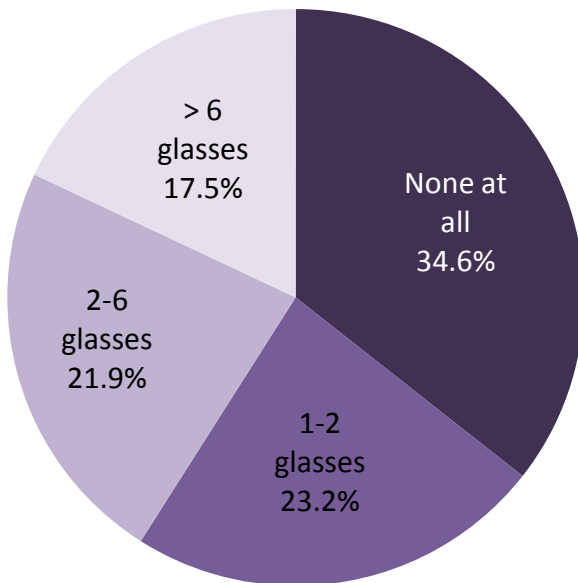
There also are qualitative differences with regard to the use of vaginal washes and steam baths between women from different countries. For example, most women use local herbs but some foreign sex workers obtain herbal washes from their home country. One woman said she washed with dettol (disinfectant soap) to become tight and dry.

The results suggest that the two most common mistakes in condom use are to place two condoms on top of one another and to not use water-based lubricant. When looking at these two factors, we find that only 29.4 percent (N_{total}=221) of sex workers report consistently correct condom use. That is; they never wear two condoms on top of one another and they always use water-based lubricant.

3.7 External factors intervening with condom use: alcohol, drugs, violence

Drugs use among sex workers is moderate but the use of alcohol uses is common among the sex workers in our sample. From the 228 respondents, 79 (34.6%) were not using alcohol or any other form of drug. Among those who reported the current use of drugs (N=3), eight used cocaine, two used XTC, 37 smoked marihuana, and six injected heroine (Table 8). 62.2 Percent of sex workers (N=143) in the sample reported the consumption of alcohol during working hours (N_{total}=222). 23.2 Percent (N=53) of sex workers from the complete sample drink just one to two cups of alcohol on a working night or day; 50 (21.9%) drink three to six cups; and forty (17.5%) individuals drink more than six cups on an evening (Figure 19).

Figure 19. Alcohol consumption during working hours among sex workers, amount per working night/day (N=222).



Our data suggest a relation between alcohol consumption and consistent condom use during the past month. Of the 79 sex workers who were not consuming any alcohol during working hours, 94.9 percent reported that they had “always” used a condom when they had sex with clients in the month prior to the interview. Among sex workers who drink more than six glasses of alcohol at nights that they are at work, only 82.1 percent had “always” used condoms with clients (N_{total}=39).

Some sex workers use a combination of substances. For example, three sex workers use both cocaine and marihuana; two combine XTC and marihuana; and five individuals use both marihuana and injection drugs (Table 8). Six persons in the sample use injection drugs and all six said that they were using clean needles.

Table 8. Numbers of sex workers who report the use of certain combinations of drugs and alcohol when they are at work (N=153)

| | Drugs and alcohol use among sex workers | | | | |
|--------------------------------|---|----------|----------|----------|------------|
| | Marihuana | Cocaine | XTC | Heroin | Alcohol |
| Inject needles | 5 | 2 | 1 | 6 | 5 |
| Uses Cocaine, Marihuana or XTC | 37 | 8 | 2 | 6 | 54 |
| Drink Alcohol | 31 | 7 | 2 | 5 | 143 |
| Totals | 37 | 8 | 2 | 6 | 143 |

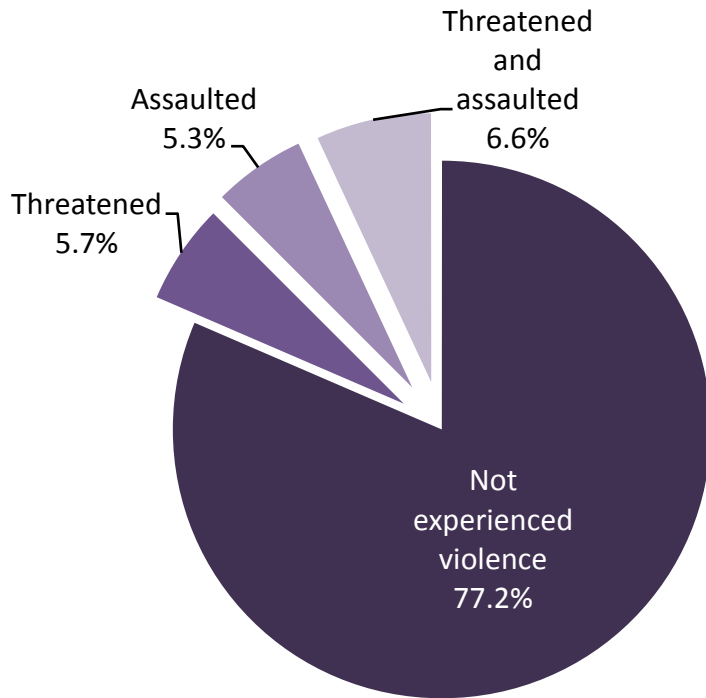
Three sex workers (1.3%) reported that they had exchanged sex for drugs in the past year. This group is particularly vulnerable because they may be easily enticed to compromise safe sex if they urgently need their drugs intake.

The number of sex workers in the sample who uses drugs is too small to establish a significant relation between drugs use and the consistency of condom use. Nevertheless, the data do suggest that drugs use might interfere with decisions about the use of condoms. Among marihuana users, 18.9 percent had not always used a condom during sex with a client in the month prior to the interview ($N_{total}=37$). For non-marihuana users, this share was 6.8 percent ($N_{total}=190$). Likewise, of the eight respondents who use cocaine, three had not consistently used condoms with clients in the month prior to the interview (37.5%). Among sex workers who did not use cocaine, 9.1 percent had not always used a condom in these situations ($N=219$).

Statistics from the 2009 BSS in Paramaribo revealed that street workers run relatively larger risks of confrontations with aggressive clients as compared to indoors workers. Forty sex workers in the present study had experienced verbal aggression and/or physical molestation. While most cases concerned threats and other incidents of verbal aggression (5.7%), some sex workers had also been physically molested (11.9%) ($N_{total}= 216$, only counting those who answered the question) (Figure 20).

27.3 Percent of sex workers who solicit clients in the street ($N= 99$) and 24.2 percent of sex workers ($N=33$) who meet clients through phone appointments had experienced some form of violence. In comparison, a much lower 15.2 percent of sex workers working indoors in clubs, bar, and massage salons ($N_{total}= 99$) had been confronted with aggression from clients. This difference in contact with violence between those who meet their clients indoors and those who meet their clients outside is probably due to a better access to protection mechanisms in places such as clubs. Security personnel and owners/managers of the establishments where sex workers work play a crucial role in creating a relatively safe work place.

Figure 20. Percentages of sex workers who had experienced violence in the year prior to the interview (N_{total}=216)



3.8 HIV/AIDS risk perception

Perceptions of the risk of exposure to HIV/AIDS may play a role in decisions about condom use. When asked whether they believed to be at a risk of HIV infection, 41.6 percent of interviewees answered affirmatively (N_{total}=226). As compared to male sex workers (N_{total}=50), among whom only 18.0 percent believed to be at risk, female sex workers were more likely to feel at risk of HIV infection (48.3%; N_{total}=176). The most common reasons named by sex workers who believed to be at risk were that the condom may break (35.1%) and that sex work is a risky job (35.1%) (N_{total}=94; Figure 21).

The majority of sex workers (57.1%) do not believe to be at risk of HIV infection. The main reason to believe that one does not run a risk to become infected with HIV is that the person always uses a condom (67.4%; N_{total}=129). Answers to other questions, however, suggest that his risk assessment is not consistent with actual behavior. Among the sex workers who believe that they are not at risk because of their consistent condom use, two individuals also reported that in the month prior to the interview they had “almost always” used condoms with clients and one person had only “sometimes” used condoms with clients (Table 9). Furthermore, 17 individuals in this group reported that they “never” use condoms with their steady partner(s)

(19.5%; $N_{\text{total}}=87$); two sex workers in this group “almost always” use condoms with their steady partner; and another two individuals do so “sometimes”.

Figure 21. Reasons named for being at risk of HIV infection (N=94)

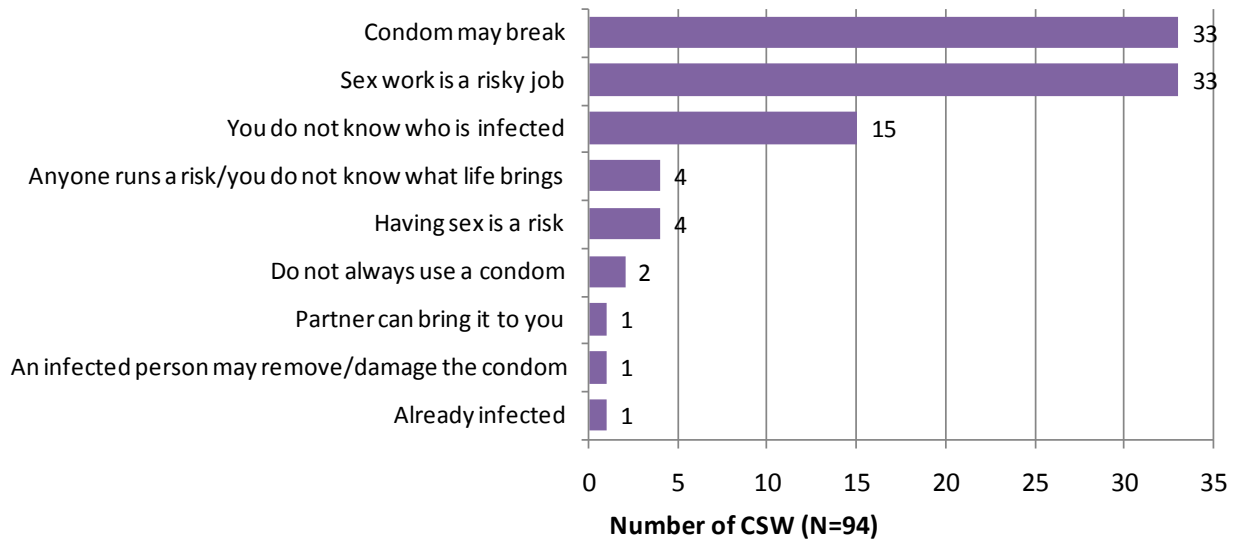
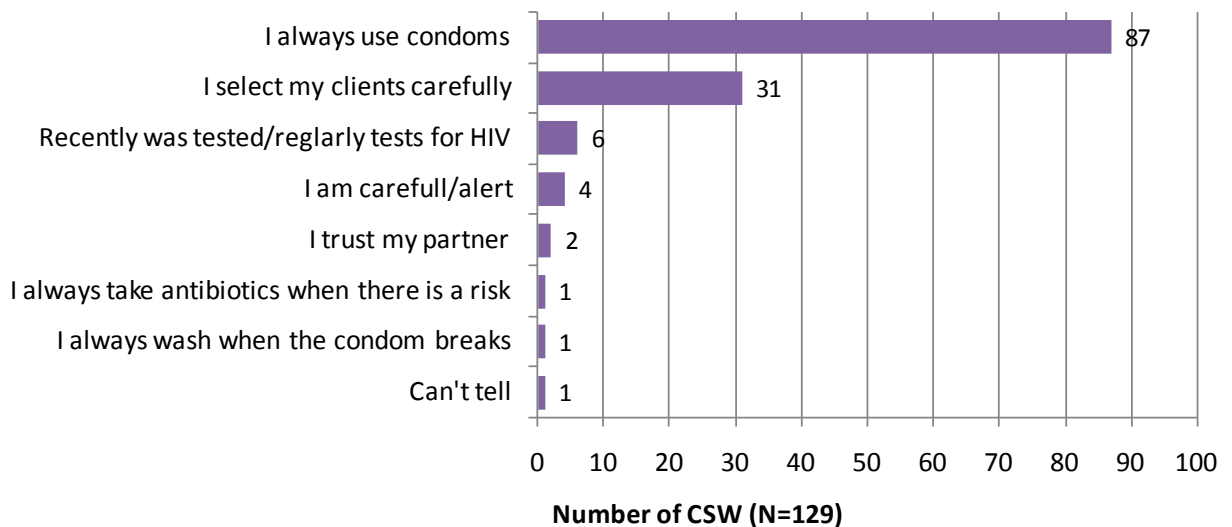


Figure 22. Reasons named by sex workers for not being at risk for HIV infection (N=129)



Another argument to justify low risk assessment, mentioned by 24 percent (31 individuals) of those believing not to be at risk, is that the person selects his or her clients carefully ($N_{\text{total}}=129$; Figure 22). Of the sex workers who gave this answer, four individuals “almost always” used a condom with their clients in the month prior to the interview (12.9%; $N_{\text{total}}=31$) and nine individuals did so only “sometimes” (29%; $N_{\text{total}}=31$). This finding suggests that there are still sex workers who believe that one can observe the presence of HIV infection. Among those who believe not to be at risk because of their careful selection of clients, nine sex workers (29%; $N_{\text{total}}=31$) “never” use condoms when having sex with their steady partner, three sex workers in this group do so “sometimes” (9.7%; $N_{\text{total}}=31$) and another three “almost always” (9.7%; $N_{\text{total}}=31$).

3.8 Knowledge of HIV/AIDS

The survey included several questions to assess general knowledge of HIV/AIDS prevention and the role of condoms therein. First, sex workers were asked: “What is the best way to prevent the sexual transmission of HIV when you are having sex?” In response, 95.1 percent of surveyed sex workers named “using a condom” as the best way to prevent the sexual transmission of HIV when you are having sex ($N_{\text{total}}=225$). The remaining 4.9 percent said they did not know.

Next the respondents were asked whether they knew of other things one could do to reduce the risk of HIV infection when having sex. Eleven persons misunderstood the question and their answers are not included in the analysis. Of the remaining 217 persons, 68.7 percent could not answer the question. Those who did have an answer named a wide variety of risk reducing strategies, of which the most common were abstinence (7.8%) and be careful/protect yourself (6.0%) were most common.

Table 10 lists all answers that were provided. Some of the answers such as “control the condom before usage”, “use lubricant” and “good communication” are indeed methods that may be used to reduce the risks of transmission of STIs including HIV/AIDS. Other methods that are mentioned are valid ways to reduce HIV transmission risks but not very applicable to sex workers, such as “abstinence”, “monogamy”, and “take an HIV test before having sex with a new partner”. Yet other answers cannot be counted among effective ways to lower HIV transmission risks. These answers include “think positively” and “hope everything goes well”.

Table 9. Risk perceptions in relation to condom use with clients and a steady partner (s), displayed by number of respondents

| Analysis of risk perceptions by use of condoms with clients and a possible steady partner(s) | | Do you believe to be at risk of HIV infection? | | | | | |
|--|---------------|--|-------------------------------|----------------------|---------------|------------|------------|
| | | Yes | No, because.... | | | Don't know | Total* |
| | | | I carefully select my clients | I always use condoms | Other reasons | | |
| In the past month, I consistently used condoms with my clients | Always | 87 | 17 | 83 | 16 | 3 | 202 |
| | Almost always | 5 | 4 | 2 | 1 | 1 | 11 |
| | Sometimes | 1 | 9 | 1 | 0 | 0 | 11 |
| | Never | 1 | 0 | 0 | 0 | 0 | 1 |
| | Don't know | 0 | 1 | 0 | 0 | 0 | 1 |
| | Total | 94 | 31 | 86 | 17 | 4 | 226 |
| In the past month, I consistently used condoms with my steady partner | Always | 21 | 5 | 26 | 4 | 1 | 55 |
| | Almost always | 0 | 3 | 2 | 1 | 0 | 5 |
| | Sometimes | 11 | 3 | 2 | 3 | 1 | 19 |
| | Never | 20 | 9 | 17 | 4 | 0 | 49 |
| | Don't know | 0 | 1 | 4 | 0 | 0 | 5 |
| | Total | 52 | 21 | 51 | 12 | 2 | 133 |

Table 10. Strategies other than using a condom that may be applied to reduce the risk of HIV transmission named by sex workers in Paramaribo and Albina ($N_{total}=217$)

| Answer | Number | Percentage |
|---|--------|------------|
| No answer | 149 | 68.7 |
| Abstinence | 17 | 7.8 |
| Be careful/Protect yourself | 13 | 6.0 |
| Monogamy | 6 | 2.8 |
| Don't kiss | 6 | 2.8 |
| Masturbation | 3 | 1.4 |
| Not work as a sex workers | 3 | 1.4 |
| Control/be careful with the condom | 3 | 1.4 |
| Take an HIV test prior to having sex (with a new partner) | 2 | .9 |
| Use lubricant | 2 | .9 |
| Hope everything goes well | 1 | .5 |
| Wash the vagina with your own urine after sex | 1 | .5 |
| Healthy food and build a strong immune system | 1 | .5 |
| Good communication | 1 | .5 |
| Avoid ejaculation inside you | 1 | .5 |
| May be transmitted in pre-ejaculatory fluid | 1 | .5 |
| Use sex toys | 1 | .5 |
| Think positively | 1 | .5 |
| Avoid blood contact | 1 | .5 |
| Avoid sex with men who have AIDS | 1 | .5 |
| Not possible; I don't trust anybody | 1 | .5 |
| Never hurry | 1 | .5 |
| Always use a condom for oral sex | 1 | .5 |
| Total | 217 | 100.0 |

These two open questions were followed by four statements to which the survey participants were asked to respond with “agree” or “disagree” (Table 11). The results suggest that when asked directly, virtually all sex workers know that a healthy looking person may be infected with HIV/AIDS (96.0%; $N_{total}=226$). This finding seems to contradict the earlier finding that 13.7 percent of sex workers believe not to be at risk of HIV transmission because they select their clients “carefully”.

The three most common misconceptions are that one can get HIV from (a) a mosquito bite, (b) using the toilet after a person who is HIV+, and (c) sharing a meal with someone who is infected. Yet also these misconceptions are rejected by a large majority of respondents, respectively 79.8 percent, 85.8 percent, and 95.6 percent of surveyed sex workers.

Seventy-two percent of respondents answered correctly rejected all three misconceptions (72.1%; $N_{total}=226$). An internationally used HIV/AIDS indicator is the percentage of people of most-at-risk populations who both correctly identify ways of preventing the transmission of HIV and reject major misconceptions about HIV transmission. For our sample population, the result for this indicator is stated in Box 5.

Table 11. Test of knowledge of the most common misconceptions about HIV transmission

| Do you agree or disagree? | Correct answer | % Correct answer | % Don't know | N_{total} |
|--|----------------|------------------|--------------|-------------|
| One can get HIV from a mosquito bite | Disagree | 79.8% | 8.3% | 228 |
| You run a risk of being infected with HIV if you share a meal with someone who is infected | Disagree | 95.6% | 1.3% | 227 |
| You run a risk of being infected with HIV if you use the toilet after a person who is HIV+ | Disagree | 85.8% | 7.1% | 226 |
| A healthy-looking person can have HIV | Agree | 96% | 1.3% | 226 |

Box 5.

Percentage of sex workers who both correctly identify using a condom as the best way of preventing the transmission of HIV *and* who reject three major misconceptions about HIV transmission.

Total: 69.2% ($N_{total}=224$)

Female: 63.6% ($N_{total}=173$)

Male: 86.5% ($N_{total}=51$)

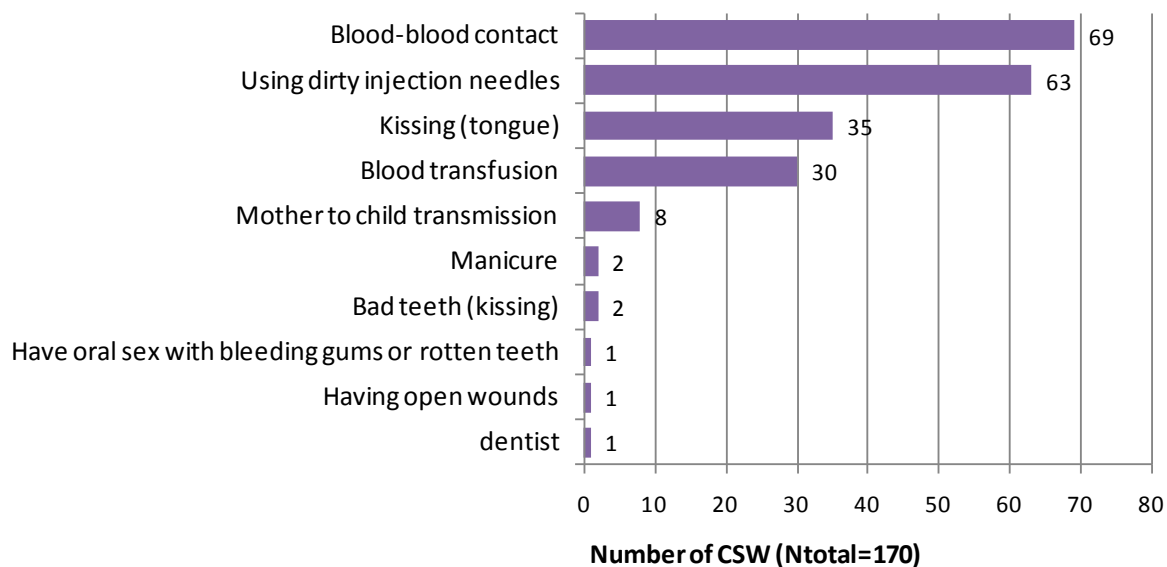
The data suggest disparities between male and female sex workers in terms of their knowledge of HIV, as measured by the above indicator (Box 5). These differences may at least partly be explained by differences in HIV-knowledge between sex workers from different countries (most male sex workers are from Suriname and Guyana). When making a comparison on the basis on nationality, we find that respectively 86.5 percent and 82.2 of sex workers from Guyana ($N_{total}=52$) and Suriname ($N_{total}=90$) both name the condom as the best way to prevent HIV transmission *and* reject three common misconceptions. Only

50 percent of sex workers from the Dominican Republic ($N_{total}=54$) and 30.8 percent of sex workers from Brazil correctly ($N_{total}=26$) answered these four questions⁸.

In order to further test knowledge of HIV/AIDS, we asked a final open question: “Do you know ways to be infected with HIV other than sexual transmission?” Three-quarters of respondents (74.6%) named at least one additional form of HIV transmission ($N_{total}=228$). The most well-known venues of HIV transmission apart from sex are blood-with-blood contact and sharing used injection (drugs) needles. These transmission ways were mentioned by respectively 40.6 percent and 37.1 percent of respondents among those who named at least one other form of HIV transmission (Figure 23).

“Tongue” or “French” kissing with an infected person, which was mentioned by 35 respondents (20.6%; $N_{total}=170$) incorporates a very small risk of HIV transmission because of possible blood contact. It is not possible to contract HIV from a closed-mouth kiss. Blood transfusion, named by 30 survey respondents (17.6%; $N_{total}=170$) continues to pose a risk, particularly in developing countries.

Figure 23. HIV transmission venues other than sex named by sex workers ($N=228$)



⁸ Only two Colombian CSW were part of the sample so for this group the percentage does not provide valid information

3.9 Sexual and reproductive health

One out of five female sex workers (19.2%, N=33) had been pregnant the past year before the study (N_{total}= 172). This figure includes one woman who was pregnant at the time of the interview. Among those women who had been pregnant in the 12 months prior to this interview (N_{total}=33), 30.3 percent had given birth to a child. More women, however, had aborted the baby; through a registered doctor (12.1%), an abortion pill (15.2%), or an unlicensed doctor (36.4%) (N_{total}=33, counting only those sex workers who had been pregnant). One woman had even had two abortions and one spontaneous miscarriage in the past year. These findings suggest that safe sex is not consistently practiced.

33.3 percent of sex workers (N=156) uses some form of anti-conception other than condoms to prevent pregnancy. Oral contraceptives are most popular (60.4% of those relying on anti-conception method), followed by contraceptive injections (26.4%), sterilization (11.3%), and the contraceptive implantation (1.9%) (N_{total}= 57).

88.4 Percent of respondents had done an HIV test in the year preceding the interview (N_{total}=225). Among the 199 sex workers who had taken the test, only one person had not obtained the test result (0.5%). In addition, one person did not know. A minority among the sex workers test for STIs other than HIV; 59.6 percent of respondents had never tested for STIs and one person had done so more than a year ago (N_{total}=225). Eighty-nine persons (39.6%) had conducted an STI test this year. This figure includes all women in the one registered club of Suriname, who are obliged to take a bi-weekly medical check-up at the Dermatology clinic.

Twenty-one (9.7%) surveyed sex workers had experienced an STI in the year preceding the interview, again suggesting that condoms are not consistently used (N_{total}= 217). Six individuals among those who had suffered from an STI did not know what kind of infection they had suffered from (13.3%). Those who did know what they had suffered from named syphilis, gonorrhea, vaginal discharge, Lice scabies and candida were all reported by no more than one person. Other than syphilis, which was named by two respondents, all other STIs had been experienced by only one person in the past year. For 18 (8.3%) respondents it was more than a year ago that they had suffered from an STI.

3.10 Access to information and services

Sex workers were asked how they would cover their medical expenses if they were to fall ill. The data show that most sex workers are not insured (Table 12). Among the Suriname sex workers (N_{total}=227); 15.7 percent has some form of health insurance, either a private insurance (in Suriname: PZS) or a Suriname state health plan. Another 20.6 percent of respondents have a Ministry of Social Affairs card (*sociale zaken kaart*). This card is extended to poor (*minvermogenden*) and very poor (*onvermogenden*) and provides access

to social welfare services including a basic state health insurance package. In addition, 4 percent of Suriname respondents reported that they would go to French Guyana for care since health services are free in this neighboring country.

Overall, however, the majority of sex workers are uninsured. They pay themselves for their medical costs when they fall ill (51.6%). Among the foreigners most will pay themselves or seek (free) healthcare in either their home country or French Guiana, with its generous public health care system. Table 12 presents the numbers of respondents from the different countries with the various ways in which they are insured. Figure 24 provides a comparison between the sex workers who pay for their health expenses out of pocket versus those who have some form of public or private health coverage.

Table 12. Type of medical insurance for sex workers from different nationalities (N_{total}= 227)

| | Type of medical insurance | | | | |
|------------------------------|---------------------------|---------------------|--------------------|---------------------|--------------------|
| | Surinamese (N=91) | Brazilian (N=27) | Guyanese (N=52) | Dominican (N=55) | Colombian (N=2) |
| Pay out of pocket | 40 | 16 | 24 | 34 | 2 |
| Welfare Insurance | 26 | 2 | 10 | 9 | 0 |
| Health insurance in Suriname | 16 | 4 | 10 | 6 | 0 |
| Other | 7 | 2 | 4 | 4 | 0 |
| Go to French Guiana | 2 | 2 | 4 | 1 | 0 |
| Don't know | 2 | 0 | 0 | 0 | 0 |
| Insurance in home country | 0 | 1 | 0 | 1 | 0 |

Sex workers were asked where they had obtained information about HIV/AIDS. The answers are displayed in Table 13. Consistent with findings from the 2009 BSS, Derma remained the main source of information (27.2%), followed by Stg Lobi (14.4%) (N_{total}=228). One out of five (20.6%) respondents had received no information at all.

In addition to being the most important source of HIV information, the dermatological service (Derma) is the best known VCT site among sex workers, largely due its role in performing the biweekly health check-ups among sex workers from licensed clubs (Table 14; mentioned by 52.6 percent of sex workers; N_{total}=228). Street workers are relatively more familiar with SMLA/ RACHAB as a test site (18.9%). Conform (Heemskerk and Uiterloo 2009), other places that were mentioned by at least five percent of respondents are in order of importance, Stg. Lobi, the RGD clinics, hospitals and clinics, and general practitioners.

Figure 24. Percentages of sex workers who pay for their health expenses out of pocket versus those who have some form of health insurance (N_{total}=227)

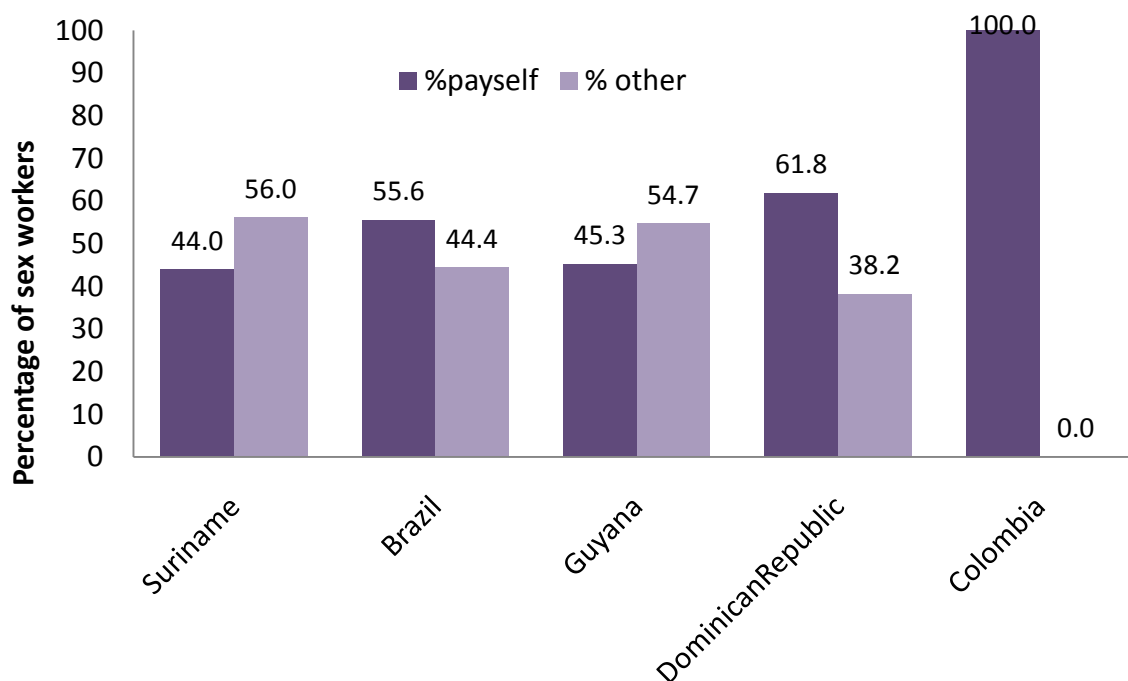


Table 13. Percentages of sex workers who have been reached by different sources of HIV/AIDS information in the 12 months preceding the interview (N_{total}=228)

| | Received information about HIV & AIDS the past 12 months from: | |
|----------------------|--|---------|
| | Frequency | Percent |
| Derma | 62 | 27.2% |
| Stg Lobi | 33 | 14.4% |
| RACHAB | 26 | 11.4% |
| Media | 26 | 11.4% |
| RGD | 17 | 7.5% |
| NAP | 11 | 4.8% |
| Home country | 8 | 3.5% |
| General Practitioner | 3 | 1.3% |
| French guyana | 3 | 1.3% |
| No information | 47 | 20.6% |

Table 14. Number and percentage of sex workers who identified a specific site as a place for HIV testing ($N_{total}=228$)

| | Do you know where to go for an HIV test in Suriname? | |
|----------------------|--|---------|
| | Frequency | Percent |
| Derma | 120 | 52.6 |
| Stg Lobi | 57 | 25 |
| RACHAB | 43 | 18.9 |
| RGD | 24 | 10.5 |
| Hospital | 15 | 6.6 |
| Don't Know | 13 | 5.7 |
| General Practitioner | 4 | 1.3 |

Finally, we tested sex workers' knowledge of the availability of support services for HIV-positive people in Suriname. Sex workers were asked where they would you bring an HIV-positive friend for social or medical support. The answers are displayed in Table 15. Also in this context Derma is the main place to seek for help (37.6%), followed by Stg Lobi with 23.1 percent, RACHAB/SMLA, 12.7 percent, the general practitioner 11.8 percent, and the regional health centers (RGD) with 8.3 percent ($N_{total}=228$). 21.8 Percent of the respondents don't know where to send this friend.

Table 15. Number and percentage of sex workers who named a specific institution as a place where HIV positive people may obtain medical or social support ($N_{total}=228$)

| | Where would you send an HIV-positive friend of yours to obtain social and/or medical support? | |
|------------------------------------|---|---------|
| | Frequency | Percent |
| Derma | 85 | 37.4% |
| Stg Lobi | 53 | 23.2% |
| RACHAB | 29 | 12.7% |
| RGD | 19 | 8.3% |
| General Practitioner | 12 | 5.3% |
| NAP | 11 | 4.8% |
| Other | 3 | 1.5% |
| Don't know where to go in Suriname | 49 | 21.6% |

4. Discussion and conclusions

The objectives of this study were to

- Provide actionable evidence for social marketing decision making for female and male sex workers;
- Identify the levels and trends evident in key behavior, risk, opportunity, ability, and motivation constructs.
- Determine which group and subgroup determinants have the greatest influence on the decision of FSWs and MSWs to use condoms.

In this section, we will further interpret the results related to these questions and compare the present findings with those of the earlier 2009 BSS in Suriname.

We identified five interfering factors that affect the decision about whether or not to use a condom, namely:

(1) It makes a difference with whom the sex workers has sex; a client or a steady partner. Our present findings are coherent with those of the 2009 BSS survey, in indicating that sex workers are less consistent in using condoms with steady partners.

(2) The use of alcohol and drugs interferes with sound decision-making. In their meta-analysis about alcohol consumption among female sex workers and their clients, Li et al. (2010) find that both sex workers and their male clients use alcohol to facilitate participation in commercial sex. Their data suggest alcohol use impairs decision-making about consistent condom use. Our results are in line with this finding.

(3) Sex workers decide about the use of condoms based on the type of sex (vaginal, anal or oral) they have with their client. Sex workers in this sample were relatively less likely to use condoms when they were having oral sex with a client.

(4) Sex workers are often offered more money to have sex without a condom. Even though the grand majority of sex workers indicated that they were not willing to have sex without a condom if clients would pay more, one individual admitted that she had commercial sex without a condom for extra pay. We cannot say how common this behavior is.

(5) Possible allergic reactions to latex may deter a sex worker from using condoms. The survey did not ask about allergic reactions to condoms and our information on this factor comes from spontaneous comments by sex workers. This topic, and possible alternatives, warrants further investigation.

These factors are further explained in Table 17.

Table 16. Factors effecting decisions of sex workers to consistently use condoms

| # | Factor | Explanation | Subgroup variation |
|----|------------------------|--|---|
| 1 | Client or partner | sex workers are less likely to use condoms when having sex with a stable or regular (non-paying) partner | Men are more likely than women to use condoms with a stable partner. A possible explanation is that male sex workers more often have multiple 'stable' partners. |
| 2a | Use of drugs | The data suggest that as compared to those who do not use drugs, both marihuana users and cocaine users are less likely to always have used a condom with clients in the month prior to the interview. | The number of drugs users in the sample was too small to compare sub groups |
| 2b | Use of alcohol | sex workers who consume more than six glasses of alcohol when they are at work are less likely than others to report that they <u>always</u> used condoms with clients in the month preceding the interview | Men are, on average, more likely than women to use a substantial amount of alcohol (>6 glasses/working night) while being at work. Also, street workers consume on average more alcohol that sex workers in clubs, bars, or massage salons. |
| 3 | Type of sexual contact | sex workers are less likely to use a condom when they have oral sex, as compared to vaginal and anal sex | We find no meaningful differences between the sub groups. |
| 4 | Money | Only one sex worker admitted in a qualitative interview that that she occasionally had commercial sex without a condom for extra pay. | Based on the data, we cannot tell what subgroups may be more willing to have sex without a condom in exchange for more money. We find, however, that age, nationality, and gender affect sexual risk taking. |
| 5 | Allergic reactions | A small number of CSW mentioned allergic reactions or itchiness following the use of (certain brands of) condoms. One woman said that the latex causes irritation in her mouth and hence she does not use a condom when having oral sex. | The number of sex workers who reported allergic reactions to condoms is too small to perform any meaningful analysis |

The table shows that there are differences between the different subgroups in the extent to which these factors play a role. The main subgroup divisions that have been found to mediate decision-making about consistent and correct condom use are gender, age, nationality, and working location. These variables are interrelated. For example, male sex workers are relatively more likely to be from Suriname or Guyana and more likely to work in the streets. On the other hand, female sex workers are relatively more likely to solicit clients indoors (club, bar, massage salon) and more often originate from Brazil or the Dominican Republic. It is not possible to tell which ones of the factors is more important in mediating condom use. A more in-depth and longer term qualitative study among the various sub groups may help better understand the various subgroup determinants.

The data suggest that gender shapes decision-making about condom use in opposing ways. Male sex workers are more likely than their female colleagues to not always use condoms with their clients and to not have used a condom during their latest vaginal or anal sexual contact with a client. On the other hand, male sex workers are more likely than female sex workers to always use a condom when having sex with their steady partner(s). Furthermore, Suriname and Guyanese sex workers (as compared to those from Brazil and the Dominican republic) and relatively younger sex workers (30 and younger, as compared to those older than 30) tend to be more likely to not always use a condom when having commercial sex. These subgroups are partly interrelated.

We find no relation between exposure to violence and the consistency of condom use. Neither does the price of condoms seem to affect decisions about whether or not to use a condom. Sex workers make extensive use of the condoms provided for free by outreach programs, VCT sites and employers; much more than two years ago (Heemskerk and Uiterloo 2009). For those who buy condoms, price is not among the selection criteria; instead condoms are purchased based on their strength and quality.

Like the consistency of condom use, also the correct way of condom use is mediated by gender, nationality, and age. The main behaviors we recorded that (possibly) increase the chances of condom failure include:

- 1) Use of two condoms on top of one another
- 2) Use of oil based vaginal spermicidal or anti-bacterial gels
- 3) Use of herbal steam baths to make the vagina tight and dry
- 4) Incorrect placing of the condom, allowing for air to remain in the top section

Sex workers also used strategies to that reduced the chances of condom rupture, namely:

- 5) Use of water-based lubricant

As with the consistency of condom use, correct condom use is related to gender and particularly nationality. For example, we find that Dominican and Guyanese sex workers are much more likely than others to use two condoms on top of one another. On the other hand, the use of herbal vaginal steam baths is a custom that is more common among the Afro-descent populations in Suriname and Guyana. These findings suggest that the various misuses of condoms are culturally learned, and must also be addressed in the context of the cultures where the sex workers are coming from.

Strategies that are applied when the condom fails are similarly largely determined by cultural background. For example, after condom failure Guyanese sex workers are more likely than any of the other subgroups to use antibiotics, while only Dominicans use vaginally inserted suppositories or "ovules" when the condom breaks or slides off. Dominicans are also the only ones who reported to wash the vagina with tooth paste after rupture of the condom. Suriname sex workers are the only subgroup where a majority reported to replace the condom and continue after condom failure. These cultural differences should be taken into account in outreach work with sex workers from different nationalities.

Finally, we compare important condom use indicators from the present study with those of the 2009 Behavioral Surveillance Survey among sex workers in Paramaribo (Table 17). Like in this earlier study, we find a high rate of self-reported condom use, with increases for all questions about the latest sexual contact. Particularly the percentage of sex worker who reports condom used during their most recent anal sexual contact with a client has increased dramatically from 87.0 percent in 2009 to 98.6 percent in 2011. On the other hand, the share of sex workers who report that they always used condoms with clients in the month prior to the interview has decreased from 96.0 percent in 2009 to 89.5 percent in 2011. Because of these contradictions we cannot indicate whether sex workers more or less frequently use condoms today as compared to two years ago.

In both years, using a condom has by virtually all respondents been identified as the best way to prevent the sexual transmission of HIV/AIDS. Because this question was asked as an open question this year, instead of the agree-disagree question from the 2009 survey, we cannot really compare the outcomes of this knowledge test though. Finally, we noticed an increase in the number of respondents who obtained condoms from one of the free distribution sources. Again, because we did not specifically ask about the receipt of free condoms in 2009 as we did this year, we cannot state how much the degree to which sex workers are reached with free condoms has increased.

In conclusion, we may state that sex workers are very conscious about consistent condom use. Also in qualitative interviews, sex workers were adamant about the importance of the

condom. In practice, however, there are various factors that reduce the likelihood of consistent condom use, including: sex with a steady partner, having oral sex, alcohol consumption, drugs use, possible allergic reactions to latex, and a need or desire for (more) money.

Table 17. Comparison of condom use indicators between 2009 and 2011

| Indicator | 2009 | 2011 | |
|---|-------|-------|----------------------|
| | % | % | N _{total} * |
| Percentage of sex workers who reported condom use the last time they had had vaginal sex (only those having vaginal sex) | 98.4% | 99.5% | 195 |
| Percentage of sex workers who reported condom use the last time they had had anal sex (only those having anal sex) | 87% | 98.6% | 71 |
| Percentage of sex workers who reported condom use the last time they had had oral sex (only those having oral sex) | 94% | 95.7% | 141 |
| Percentage of sex workers who report that they <u>always</u> used condoms with their clients in the month prior to the interview | 96% | 89.5% | 228 |
| Percentage of sex workers who report that they always used condoms with their steady partner in the month prior to the interview (only those with a steady partner) | 32.3% | 32.7% | 98 |
| Percentage of sex workers who correctly agree with the statement that having sex without a condom increases the risk of HIV infection | 97.7% | | |
| Percentage of sex workers who correctly identify 'using a condom' as the most effective way to prevent the transmission of HIV | | 95.1% | 225 |
| Percentage of sex workers who received free condoms in the year prior to the interview | <70% | 84.2% | 228 |

* Denominator

The study demonstrates that it is important to not perceive and treat all sex workers as one homogeneous group. We find provoking differences between sex workers belonging to different sub groups based on age, gender, and nationality with regard to the factors interfering with condom use, correct condom use practices, and strategies used after condom rupture.

Finally, even though most sex workers have decent knowledge of HIV/AIDS, there are two areas where more information and awareness sharing is needed. In the first place, sex workers need to know what to do after condom failure. A wide variety of emergency

strategies were reported aimed at reducing the chances of pregnancy and HIV infection. Very few of these strategies are effective ways to protect oneself.

Secondly, particularly foreign sex workers are poorly informed about where to go for HIV/AIDS information, testing and counseling, and support for HIV+ people. Providing such information and assistance in access to Suriname HIV/AIDS services may help reduce the number of new HIV infections among sex workers and their clients, and improve the health of HIV+ persons.

5. Recommendations

Based on the results, we provide the following recommendations

1. Outreach activities aimed at improving condom use among sex workers should not merely focus on the consistency of condom use, but also on correct condom use and on what can be done to reduce chances of HIV infection and pregnancy after condom failure.
2. Education on consistent and correct condom use should not only target sex workers but also their clients. Clients continue to ask for sex without a condom and do allow for sexual practices that increase the chances of condom rupture, such as using two condoms.
3. Sex clubs and massage salons should provide education on correct condom use every time new sex workers come in.
4. Attractive and explicit education and awareness materials must be developed to inform sex workers about consistent and correct condom use, about what to do after condom failure, and about where to go for HIV/AIDS information, HIV testing and counseling, and support for HIV+ people. Most efficient may be an informational 10-15 minute infomercial developed for and with sex workers in their own languages. Such an instruction video could be obliged material for new sex workers in clubs and salons. In addition, it may be worthwhile to develop an informational leaflet in the various languages (Spanish, Portuguese, English, Dutch)
5. Only a small proportion of sex workers had received information about proper condom use from TV or the internet. These mass media, as well as social media, provide a great opportunity to reach a wide range of especially Suriname sex workers and their clients. Typically HIV/AIDS awareness advertisements convey the message to use a condom, but not how to use a condom.
6. Three-quarters of sex workers have not received information about consistent and correct condom use at school. In order to increase awareness of particularly correct condom use among sex workers and their clients, this topic should be included in sexual education or basic life skills classes at high school. A good understanding of how to put on a condom and how to reduce the chances of condom rupture is an essential life skill for today's teenagers. Again, this action will only affect Suriname sex workers and clients.

7. Education and awareness programs aimed at promoting consistent and correct condom use must take cultural differences of the various sub groups of sex workers into account. When working with a particular subgroup, for example Dominican club workers, information provision should pay extra attention to misconceptions that exist in this population sub group.
8. At present only one sex club is registered and takes part in the STI prevention program of the dermatological service. All sex clubs and massage salons should be obliged to register and take part in this program in order to better reach sex workers with information and reduce sexual health risks.
9. Just like any industry, the sex industry should commit to basic health and safety standards for its workers. The Suriname government division for labor inspection should controls sex clubs for adherence to –to be defined- workers’ rights and conditions, including the free availability of condoms in these clubs.
10. Many sex workers expressed an interest in HIV testing but many either were hesitant to visit a VCT site or did not know where to go. The Ministry of Health/National AIDS Program should provide regular (e.g. bi-annual) free and anonymous HIV testing and counseling services in all sex work locations, including clubs, bars, massage salons, and streets.
11. While various studies have been conducted among sex workers in Suriname, we know little about their clients. More research is needed to learn about the sexual behavior of clients and their reasons to request unsafe sex.
12. The suggested activities with regard to improving education and awareness about condoms should be further developed with input from the different subgroups of sex workers. Participatory methods should be applied to learn more about the best ways to convey information to all subgroups of sex workers.

References

- CAREC/PAHO and Maxi Linder Foundation (2005). HIV/AIDS and Commercial Sex Work in Suriname. An HIV sero-prevalence and behavioral study among commercial sex workers (sex workers) in Suriname. NAP, Paramaribo, Suriname
- Chersich MF, Luchters SM, Malonza IM et al. (2007). Heavy episodic drinking among Kenyan female sex workers is associated with unsafe sex, sexual violence and sexually transmitted infections. *Int J STD AIDS* 18:764–9.
- Heemskerk, M. and M. Uiterloo (2009). Commercial Sex Work in Paramaribo, Suriname. A Behavioral Surveillance Survey and Sero-Prevalence Study among commercial sex workers in the streets, clubs, bars, and salons of greater Paramaribo city. Report commissioned by the National AIDS Program. Suriname (SUR-506-G03-H). Paramaribo, Suriname.
- Inciardi JA, Surratt HL. (2001). Drug use, street crime, and sex-trading among cocaine-dependent women: implications for public health and criminal justice policy. *J Psychoactive Drugs* 33: 379–89.
- Markosyan KM, Babikian T, DiClemente RJ et al. (2007). Correlates of HIV risk and preventive behaviors in Armenian female sex workers. *AIDS Behav* 11:325–34.
- Ministry of Health, Republic of Suriname (2010a). Suriname Country report on the UNGASS on HIV/AIDS, January 2008-December 2009. Paramaribo, Suriname: Ministry of Health.
- Ministry of Health, Republic of Suriname (2010b). HIV Surveillance Rapport 2004-2008. Paramaribo, Suriname: Ministry of Health.
- PAHO, Ministry of Health, M. Schmeitz and J. Nieuwendam J. (2009). Behavioral Surveillance Survey and sero-prevalence study among Commercial Sex Workers in the border districts Nickerie and Marowijne in Suriname. PAHO/WHO and the Government of Suriname.
- Surratt H. (2007) Sex work in the Caribbean Basin: patterns of substance use and HIV risk among migrant sex workers in the US Virgin Islands. *AIDS Care* 19:1274–82.
- Wang B, Li X, Stanton B et al. (2007) Sexual coercion, HIV-related risk, and mental health among female sex workers in China. *Health Care Women Int* 28:745–62
- Van Andel, T.R., de Korte, S., Koopmans, D., Behari-Ramdass, J.A. & S. Ruyschaert (2008). Dry sex in Suriname. *Journal of Ethnopharmacology* 116 (1): 84-88.

ANNEXES

Annex 1 Qualitative interview guide

| | |
|--------------|-----------|
| Place/city: | Location: |
| Nationality: | Age: |
| Interviewer: | Date: |

1. How did you get here (here in Suriname, here in the club, or here in the streets)?
2. Particularly for migrants; why did you leave your home country? How had you heard about Suriname?
3. Apart from this location, have you worked or do you work in other places in Suriname or abroad? From your perspective, what are the best types of locations to work? Why?
4. How many days did you work in the week prior to the interview? _____ (number). Is that a common number of days to work for you? And for other women/men around here? Do you usually only work at night or also at daytime?
5. How many clients do you get on a regular weekend day? And during the week?
6. How much do you earn per client? _____ SRD / USD/ gr. Gold per 'turn'? And for the entire night? Is that a regular wage for women/men working around here (in this club, here in the streets, in this mining camp?). What are going rates in this location? What determines whether someone earns more or less?
7. Is condom use a factor that affects the price, that is, Have you been offered to have sex without a condom?
8. Do you have a condom on you? Can I see it? (write down brand/type). If the person has no condom; ask if she has condoms in the room.
9. Is this the type you usually use?
 - a. Do you have a preferred brand or type?
 - b. When you buy condoms, how do you decide which ones to buy?
 - c. Do you also use condoms provided by others, such as the club where you work or clients, or do you always take care of your own condoms?
 - d. In the past month did you use a condom provided by your sex partner? (client or non client)
10. What would be a reason to have sex without a condom?

- a. Has it occurred that you did not have enough money to buy condoms, and therefore not used them?
- b. Do you make exceptions for known customers or your own partner?
- c. How much money would someone have to offer for you to forget about the condom?
- d. Has it occurred to you that you had run out of condoms at the moment that you found a client? What did you do?
- e. Has it occurred that you did not use a condom because you were afraid of losing client?
- f. Have clients or other men ever forced you to have sex without a condom? Has this happened in the past 12 months?
- g. Do you continue having sex when the condom has ripped (e.g. to not disappoint the client)

11. If a client does not want to use a condom; how do you convince him that he should?

12. What do you do to prevent the condom from breaking?

- a. Do you use lubricant – oil or water based? Where do you get your gel from?
- b. Do you use two condoms on top of one another?
- c. Do you use particularly strong condoms for anal sex?
- d. Any other strategies?

13. Do you use condoms together with other products? Why do you use condoms together with these products

14. If the condom breaks, what do you do?

15. Other than the condom, do you believe there any other things that protect you against HIV/AIDS? Do you use any home or alternative remedies to protect yourself, for example in addition to the condom, instead of the condom, or when the condom has broken?

16. Do you know where you can go for free condoms? (Provide information about Libi/Rachab; Hand over free Libi condoms)

Annex 2 Survey form (English)

Date: _____

Location: _____

Personal code:

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
|--|--|--|--|--|--|

Personal Code

1 = First letter first name

2 = First letter family name

3 = Year of birth (2 spaces)

4 = Male (M)/Female (F)

GPS: N: _____ W: _____

17. How old are you now? _____ Years

18. Number of children and/or other family members you support financially with their ages:

a. _____ b. _____ c. _____ e. _____ f. _____
 _____ d. _____ _____

19. What is your nationality/ what country do you come from?

- a. Suriname d. Dominican f. Other:
- b. Brazilian e. French g. Other Latin:
- c. Guyanese f. Chinese

20. With which population group do you identify / belong?

- a. Creole c. Hindustani e. Javanese g. Maroon
- b. Indigenous d. Mix f. Chinese h. Other:

21. What is the highest level of formal education you completed?

- a. None g. Completed High school
- b. Class of Primary school (GLO) h. University
- c. Completed Primary school i. Special education
- d.Class of Secondary school (VOJ) j. Technical/vocational
- e. Completed Secondary school k. Other: _____
- f.Class of High school (VOS)

22. How old were you the first time someone paid to have sex with you? _____ Years

23. Did you use a condom? a. Yes b. No

24. Where do you usually find / meet your clients?

- a. On the street c. In a house e. In a club g. In a cabaret (gold fields)
- b. In a bar d. In a hotel f. By phone appointment h. Other: _____

25. Where do you usually have sex with your clients?

- a. Somewhere outdoors c. At my own home e. In the club where I work
- b. In a bar d. In a (short-stay) hotel g. cabaret
- h. other: _____

26. Do you only work as a sex workers in Suriname or in other countries as well?

- a. Only Suriname b. French Guiana c. Guyana d. Brazil e. Other _____

27. What clients do you usually have?

- a. Men b. Women c. Men and women d. Other: _____

28. Do you perform the following sexual services? (check all that apply)
 a. Vaginal sex b. Oral sex c. Anal sex
29. The last time you had vaginal sex with a client, did you and your client use a condom?
 a. Yes b. No c. no vaginal sex d. No answer
30. The last time you had anal sex with a client, did you and your client use a condom?
 a. Yes b. No, only regular condom c. No condom d. No anal sex e. No answer
31. The last time you had oral sex with a client, did you or your client use a condom or dental dam? (be flapje)?
 a. Yes b. No c. No oral sex d. No answer
32. In the past month did you consistently use condoms with your clients ?
 a. Always c. Don't know e. Never
 b. Sometimes d. Almost every time f. No answer
33. Did you ever receive information on how to properly use a condom?
 a. No b. Yes at school c. Yes from family or friends d. Yes from an organization
 e. Other _____
34. Where do you usually get your condoms? (multiple answers possible)
 a. Pharmacy/drug store d. RGD clinic g. NAP
 b. Supermarket e. Stg. Lobi h. Other, _____
 c. Derma f. RACHAB (SMLA) i. Brought from abroad
35. What criteria do you use when buying and/or obtaining condoms?
 a. Price b. Strength c. Brand d. Custom/habit e. Material f. Other _____
36. Are you currently using any drugs?
 a. Marijuana/Hashes c. Never used drugs e. Amphetamines
 b. Cocaine (crack, coke) d. Not using drugs now f. Other, _____
37. Have you injected drugs in the past 6 months? Yes No no answer
38. If so, did you use clean needles to inject the drugs?
 Yes No no answer
39. In the past 12 months, have you exchanged sex for drugs?
 a. Yes b. No c. No answer
40. At moments that you are at work do you consume alcohol? How much?
 a. Nothing at all b. 1-2 glasses c. 3-6 glasses d. >6 glasses
41. Do you have a steady partner? If yes, for how long have you been together?
 a. No steady partner c. Yes, 6-12 months e. Yes, 2-5 years
 b. yes, 1-6 months d. Yes, over a year f. Yes, longer than 5 year
42. Do you have more than one non-paying partners? If yes, how many?
 a. No b Yes, (write number) _____ c. No answer

43. In past month did you consistently use condoms with your steady partner(s)?
- a. Always b. Almost every time c. Sometimes
d. Never e. Don't know f. No answer
44. In the past months have you experienced problems with condom use?
- a. Slid off e. Rip/Burst
b. Damaged when opened/put on f. Secretly removed by partner
c. Got stuck g. Other; _____
d. No problems h. Not applicable
45. What do you do when a condom breaks or slips off? (multiple answers possible)
- a. Rinse/wash g. Just continue
b. Take antibiotics (e.g. 'red-and-black') h. Take morning after pill (pregnancy)
c. Take morning after pill (against HIV) i. Immediately stop having sex
d. Replace the condom j. No action, hope or pray for the best
e. Seek medical advice/help asap k. Take HIV test asap
f. Take HIV test after three months l. Other _____
46. Do you or your sexual partner (paying or non-paying) ever wear two condoms on top of one another for additional protection?
- a. Always c. Don't know e. Never
b. Sometimes d. Almost every time f. No answer
47. Do you use water-based lubricant to decrease the risk of condom rupture?
- a. Always c. Don't know e. Never
b. Sometimes d. Almost every time f. No answer
48. (for women only): Do you wash your vagina with herbs to remain dry and tight?
- a. No, never b. Yes, daily c. Yes, weekly d. Once in a while
49. Do you think you are at risk for HIV infection?
- a. Yes, because: _____
b. No, because I always use condoms with clients
c. No, because I select my clients carefully
d. No, because: _____
e. Don't know
50. In the past 12 months, have you received information about HIV and AIDS? If yes, from who?
- a. RGD clinic b. Derma c. Stg. Lobi d. NAP
e. General Practitioner f. SMLA g. Media h. Other _____
i. No information j. French Guiana k. Home country
51. In the last 12 months, have you received free condoms from an outreach program, activity, employer or clinic? If yes, from which one?
- a. RGD clinic d. RACHAB (before Maxi Linder) g. No condoms received
b. NAP e. Stg. Lobi h. Other: _____
c. Derma f. Employer (club owner, pimp)

52. What is your opinion of these condoms? Are they pleasant to use?

- a. Perfectly fine b. Too dry c. Too tight d. Too thin e. Too thick f. Unpleasant smell
g. other, _____

53. If a friend of yours would turn out to be HIV+, where would you send him or her to obtain social or medical support **in Suriname**?

- a. RGD clinic b. Stg. Lobi c. NAP d. General Practitioner
e. Stg. Rachab f. Derma h. Other, _____
i. Don't know where one can go in Suriname for support to HIV+ people

54. What is the best way of preventing the sexual transmission of HIV when you are having sex?

Answer: _____

55. Do you know other ways of reducing the risk of HIV infection when you are having sex?

Answer: _____

| Do you agree or disagree? | Agree | Disagree | Don't know |
|--|-------|----------|------------|
| 56. One can get HIV from a mosquito bite | | | |
| 57. You run a risk of being infected with HIV if you share a meal with someone who is infected | | | |
| 58. You run a risk of being infected with HIV if you use the toilet after a person who is HIV+ | | | |
| 59. A healthy-looking person can have HIV | | | |

60. Do you know ways to be infected with HIV other than sexual transmission?

- a. No b. Yes , _____

61. Do you know where to go for an HIV test **in Suriname**? If yes, please state where?

- a. RGD clinic d. Stg. Rachab (Maxi linder) g. Other: _____
b. Derma e. General Practitioner h. hospital
c. Stg. Lobi f. Don't know where to go

62. When did you have a sexually transmitted infection (STI) for the last time?

- a. In the past 12 months b. Never c. More than a year ago d. Don't know

63. In the past year, have you tested for HIV?

- a. Yes b. No c. Don't know d. No answer

64. If you did an HIV test, please do not tell me the result, but did you find out the result of your test?

- a. Yes b. No c. Don't know d. No answer

65. In the past year, have you tested for STIs other than HIV?
 a. Yes b. No c. Don't know d. No answer
66. If you had an STI in the past year, what kind of STI was it?
 a. Don't know b. _____
67. What did you do to treat this STI?
 a. No treatment, it went away by itself e. I bought medicine at the pharmacy
 b. I received treatment from Stichting Lobi f. I used a home remedy
 c. I received treatment from derma g. Other, _____
 d. I received treatment from my General Practitioner
68. In the last 12 months, have you been threatened with violence or have you been assaulted?
 a. No c. Yes, assaulted e. No answer
 b. Yes, threatened d. Yes, threatened and assaulted
69. Do you use any contraceptives other than the condom to protect yourself against unwanted pregnancy? If yes, which one?
 a. No other contraceptives c. I don't know
 b. Yes, _____ d. No answer
70. Have you been pregnant in the past 12 months? If yes, what did you do?
 a. No pregnancy e. Yes, I had the child
 b. Yes, I had an abortion by a non-registered/illegal doctor f. I don't know
 c. Yes, I took the morning after pill / abortion pill g. No answer
 d. Yes, I had an abortion by a legal/registered doctor
71. If you were to fall ill, how will your medical expenses be covered?
 a. I have health insurance c. I have to pay for my own medical expenses
 b. I have a social security (*sociale zaken*) d. other: _____
 e. I go to French Guiana where care is free f. I have insurance in my home country

THANK YOU FOR YOUR PARTICIPATION IN THIS SURVEY

Annex 3. Raw data pertaining to Figure 7 and Figure 8

Locations where male and female sex workers who work in Paramaribo and Albina solicit their clients

| | Street/ squares | Club or massage salon | Phone | House | Bar | Hotel | Cabaret | Internet | Parties |
|------------------|--------------------|-----------------------------|-------|-------|-------|-------|---------|----------|---------|
| Men (N=51) | 66.7% | 13.7% | 11.8% | 27.5% | 2.0% | 3.9% | 0.0% | 2.0% | 2.0% |
| Women (N=177) | 39.5% | 49.2% | 15.8% | 6.8% | 11.3% | 6.2% | 6.8% | 0.0% | 0.0% |
| Total (N=228) | 45.6% | 41.2% | 14.9% | 11.4% | 9.2% | 5.7% | 5.3% | 0.4% | 0.4% |

Locations where male and female sex works have sex with their clients

| | Outdoors | Bar | At home | Hotel | Club where I work | Cabaret |
|---------------|----------|-------|---------|-------|-------------------|---------|
| Men (N=51) | 13.7% | 19.6% | 37.3% | 45.1% | 3.9% | 0.0% |
| Women (N=177) | 14.1% | 6.2% | 11.9% | 36.2% | 47.5% | 5.6% |
| Total (N=228) | 14.0% | 9.2% | 17.5% | 38.2% | 37.7% | 4.4% |