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# Behavioural Surveillance Survey & Seroprevalence study among Sex Workers in Paramaribo, Suriname

Final report submitted to the National AIDS  
Programme,



**Nationaal AIDS Programma**



Ministerie van Volksgezondheid



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# Behavioural surveillance survey & seroprevalence study among sex workers in Paramaribo, Suriname

In-Country Mixed-Methods Research and Data Collection  
June 2012 | Final

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## Submitted to:

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Ministry of Health (Ministerie van Volksgezondheid)  
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## Submitted by:



Social Solutions  
Siriusstraat 14  
Paramaribo, Suriname  
Tel: (597) 457885

## Authors:

Marieke Heemskerk & Celine Duijves  
Email: mheemskerk@yahoo.com  
Email: celineduijves@hotmail.com

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

Marieke Heemskerk, Celine Duijves, & Melvin Uiterloo

Social Solutions Consultancy



## Abbreviations

AIDS	Acquired Immuno-deficiency Syndrome
ARV	Anti Retro Viral
BSRG	Policy plan Sexual and Reproductive Health (Beleidsplan Sexuele en Reproductieve Gezondheid)
BSS	Behavioural Surveillance Survey
CCP	Comprehensive Condom Programmemeing
CBO	Community Based Organization
Derma	Department of Dermatology
FBO	Faith Based Organization
GO	Governmental Organization
HIV	Human Immunodeficiency Virus
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 Programme
NBCCS	New Beginnings Consulting and Counseling Services
NGO	Non Governmental Organization
NSP	National Strategic Plan on HIV/AIDS
PAHO	Pan American Health Organization
PEP	Post Exposure Prophylaxis
PMTCT	Preventing Mother-to-Child Transmission (of HIV)
RGD	Regional Health Service (Regionale Gezondheidsdienst)
Seroprevalance	The number of persons in a population who test positive for a specific disease based on serology (blood serum) specimens.
Sex workers	Commercial Sex Worker
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
XTC	Ecstasy, also known as MDMA (3,4-Methylenedioxymethamphetamine), an entactogenic drug

# Summary

**Introduction:** This report presents the results of a Behavioural Surveillance Survey and seroprevalence study among male and female sex workers in Paramaribo, Suriname, South America. The study objectives were to:

- Identify, locate, and map clubs, bars, and houses for sex workers, sex workers hustling zones, and other locations where sex workers solicit or have sexual contact with (potential) clients.
- Sketch a demographic and socio-economic profile of female and male sex workers active in Paramaribo
- Provide a better understanding of sexual practices, sexual risk behaviours, condom usage, knowledge on HIV/AIDS, and working conditions among different subgroups of sex workers by means of a Behavioural Surveillance Survey (BSS). The various subgroups will be identified on the basis of sex, nationality/ethnicity, working location (street, club, massage salon), and other possibly relevant factors.
- Provide an informed estimate of HIV prevalence among different subgroups of sex workers in Paramaribo.

**Methods:** Fieldwork was conducted between November 2011 and February 2012. A quantitative survey was conducted with 317 sex workers in clubs, streets, and massage salons in Paramaribo, among whom 255 women and 62 men. The sample included sex workers from different subgroups based on gender, working location, and nationality. A total of 191 persons participated in the seroprevalence study, among whom 178 women and 13 men. Qualitative methods included observations and informal conversations with sex workers and club, bar and salon owners. Limitations of the study were the fact that random sampling was impossible and failure to include Chinese sex workers.

**Results:** Surveyed sex workers were on average 29.3 years old. The large majority of sex workers in our sample were women (80.4%). The female sample population was dominated by Surinamese (34.9%), followed by Dominicans (23.9%), Guyanese (23.5%), and Brazilians (15.3%). Male sex workers were mostly Surinamese (66.7%) and Guyanese (29.4%). The mean age of having paid sex for the first time was 21.7 years. In terms of educational achievement there is not much difference between women and men in the sample. About half of surveyed sex workers had completed secondary school or gone beyond. 54.3 Percent of the sex workers had a steady partner and 70.7 percent supported one or more children and/or family members, with women supporting on average more dependents than men.

Of the 191 sex workers who did the HIV-test, 11 persons (5.8%) tested HIV+. Even though the number of HIV+ sex workers is too low to perform meaningful statistical analyses, several remarkable features were observed about this group, including the fact that all were Surinamese or Guyanese.

The majority of female sex workers served men only (92.5 percent) and the others worked with men and women. Twenty out of the 62 surveyed men reported that they had paid sex with both men and women (37.3%); the others only served men. 79.8 Percent of the sex workers had no experience with sex work across the border of Suriname. Gender and nationality play an important role in defining

where sex workers meet clients. Male sex workers were more likely than females to be walking the streets, while women were more likely to work in a club, bar or massage salon. Suriname and Guyanese sex workers were relatively likely to solicit clients in the streets (resp. 51.9% and 78.2%). Brazilian and Dominican women, by contrast, most often worked in a club or massage salon (resp. 97.4% and 85.2%). Almost half of the female sex workers had sex in the establishment where she worked. In addition, both male and female sex workers commonly brought clients to a hotel.

Sex workers obtained condoms mostly from the (Chinese) supermarket (37.2%) or pharmacy (14.2%). In addition, women who worked in clubs, bars or massage salons often received condoms in the establishment where they worked (24.6%). Other sources from where sex workers obtained condoms were mostly places that distribute condoms for free such as Derma (24.3%) and Foundation Rachab (14.2%). Almost three-quarters of those who had received free condoms (75.2%) were of the opinion that the free condoms were perfectly fine.

Out of the 270 sex workers, only one male and one female sex worker responded that they had not used a condom the last time they had been paid to have vaginal sex. 96.0 Percent of sex workers had used a condom the last time they had performed oral sex with a client. Only one male sex worker reported that he had not used a condom the last time he had had anal sex with a client. All women who offered anal sex to clients said that they had used a condom the last time they had done this. For both men and women the overall data suggest that consciousness of condom use has risen in the past couple of years. Nationality affects consistent condom use; 96.8 Percent of Dominican sex workers ( $N_{\text{total}}=62$ ) reported that they had always used condoms with clients in the month prior to the interview. Surinamese, Guyanese and Brazilian sex workers were less likely to report that they had always used a condom with clients in the month preceding the interview (respectively 87.8, 85.0%, and 88.5%).

When having sex with a steady partner, condom use is less consistent. 48.8 percent of surveyed sex workers with at least one steady non-paying partner responded that they never use condoms with their steady partner ( $N_{\text{total}}=159$ ). The observations that 17.7 percent of female sex workers ( $N_{\text{total}}= 248$ ) had been pregnant and that 7.2 percent ( $N_{\text{total}}= 304$ ) 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 of sex workers in our sample had experienced a problem with condoms in the month prior to the interview. The most common problem was that the condom had ripped or broken.

Of the 95 persons who both responded to the question about condom failure and did the HIV test, five persons were HIV+. Of these five persons, four responded that they had experienced problems with their condoms at least once in the month prior to the interview. 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. We found remarkable differences between sex workers of different countries in the strategies used to mediate the possible consequences of condom failure. Among the respondents, 12.3 percent had never received any information about how to properly put on a condom. Just under half of sex workers (44.5%) had obtained information about proper condom use from an outreach organization.

Almost a third 29.8% of respondents were not using alcohol or drugs. Among those who reported the current use of drugs (76 individuals), twelve used cocaine, four used XTC, and 59 smoked marijuana and/or used hashish. Alcohol was consumed by 64.8 percent of sex workers during working hours ( $N_{total}=310$ ). The data suggest that both alcohol consumption and drugs use interfere with decisions about the use of condoms. The largest share of sex workers in the sample (80.7%) had not experienced violence in the year preceding the interview.

Of all interviewees, 40.3 percent felt at risk of HIV infection, with female sex workers being more likely to feel at risk than males. The most common reasons to feel at risk were that sex work is a risky job and that the condom may break. 96.5 Percent of surveyed sex workers named "using a condom" as the best way to prevent the sexual transmission of HIV. Four misconceptions about HIV transmission are that one can get HIV (a) from a mosquito bite, (b) by sharing a meal with someone who is infected, or (c) by using the toilet after a person who is HIV+, and (d) that a healthy-looking person can't have HIV. These misconceptions were rejected by respectively 77.6 percent, 93.0 percent, 83.2 percent and 96.5 percent of respondents. Among male sex workers, 88.7 percent correctly answered all questions, versus 61.0 percent of female sex workers.

The data show that the majority of sex workers (54.8%) are uninsured and pay themselves for medical costs when they fall ill. The Department of Dermatology is the best known place to obtain information about HIV/AIDS, to do an HIV test, and to receive social and/or medical support for people who are HIV+. Just over one quarter of sex workers reported that they had not received any information about HIV/AIDS in the previous year (26.2%;  $N_{total}=317$ ).

**Discussion and conclusions:** The researchers conclude that age, gender, and nationality shape sexual behaviour and HIV&AIDS knowledge among sex workers. These factor, in turn, interfering with condom use, correct condom use practices, and strategies used after condom rupture. The results suggest that discussions about condom use are affected by with whom the sex worker has sex, the type of sexual contact, and the use of alcohol and/or drugs. Surveyed sex workers displayed various behaviours that increase the risk of condom failure, including: wrongly putting on the condom; using two condoms on top of one another; using vaginal washes to become tight and dry; and not using water-based lubricant. Most sex workers have decent knowledge of HIV&AIDS but they need to know what to do after condom failure. Particularly foreign sex workers are poorly informed about where to go for HIV&AIDS information, testing and counselling, and support for HIV+ people. Main BSS and seroprevalence indicators are listed in Table 1.

**Recommendations:** The researchers recommend that outreach services should not merely focus on the consistency of condom use and not only target sex workers but also their clients. Education, information, and awareness should be provided in working locations, mass media and schools and should focus on STIs in addition to HIV. For this reason education and awareness materials must be developed with considering of cultural differences within sex worker' sub groups. Outreach activities should make a particular effort to reach male sex workers and their clients.

Table 1 BSS and seroprevalance study indicators

Indicator	2012	
	% (N*)	N <sub>total</sub> **
Seroprevalence among sex workers (% HIV+)	5.8% (11)	191
Seroprevalence among female sex workers (% HIV+)	3.9% (7)	178
Seroprevalence among male sex workers (% HIV+)	30.8% <sup>1</sup> (4)	13
Percentage of sex workers who reported condom use the last time they had had vaginal sex with a client (only those having vaginal sex)	99.3% (268)	270
Percentage of sex workers who reported condom use the last time they had had anal sex (only those having anal sex)	98.9% (92)	93
Percentage of sex workers who reported condom use the last time they had had oral sex (only those having oral sex)	96% (192)	200
Percentage of sex workers who report that they <u>always</u> used condoms with their clients in the month prior to the interview	89.9% (284)	316
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)	26.7% (39)	146
Percentage of sex workers who correctly identify 'using a condom' as the most effective way to prevent the sexual transmission of HIV	96.5% (304)	315
Percentage of sex workers who both correctly identify using a condom as the best way of preventing the sexual transmission of HIV <i>and</i> who reject three major misconceptions about HIV transmission.	66.5%	316
Percentage of sex workers who received free condoms in the year prior to the interview	80.1%	317
Percentage of sex workers who received HIV/AIDS information in the year prior to the interview	73.8% (234)	317
Percentage of sex workers who <b>do not</b> believe that they are at risk of becoming infected with HIV	57.2% (180)	315

\*Numerator, number of persons giving a certain answer

\*\* Denominator, total number of persons answering the question

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<sup>1</sup> Because of the low number of male sex workers who were tested, we cannot generalize from this figure to the population of male sex workers at large.



# Table of contents

Acknowledgements.....	0
Abbreviations.....	1
Summary.....	2
Table of Contents.....	6
Table of tables.....	8
Table of figures.....	9
1. Introduction.....	10
1.1 Study Aims and Objectives.....	10
1.2 Commissioning agency and beneficiaries.....	10
1.3 Suriname and HIV/AIDS.....	11
1.4 Most At Risk Populations (MARPs) and HIV/AIDS in Suriname.....	12
1.5 Study outline.....	13
2. Methods.....	14
2.1 Study period and locations.....	14
2.2 Study population.....	14
2.3 Sampling strategy and sample.....	16
2.4 Survey and VCT procedures.....	18
2.5 Protection of Human Subjects and Ethical Review.....	19
2.6 Data analysis.....	19
2.7 Research team.....	19
2.8 Limitations and assumptions.....	20
3. Results.....	21
3.1 Demographic and social profile.....	21
3.2 Working conditions.....	25
3.3 Obtaining condoms.....	28
3.4 Consistency of condom use.....	31
3.5 Condom failure.....	32
3.6 Conscious condom use.....	36
3.6 External factors intervening with condom use: alcohol, drugs, violence.....	40
3.7 HIV/AIDS risk perception.....	43

3.8	Knowledge of HIV/AIDS.....	44
3.9	Seroprevalence .....	46
3.10	Sexual and reproductive health .....	47
3.10	Access to information and services .....	49
4.	Discussion and conclusions.....	54
4.1	Identifying, mapping, and reaching sex workers .....	54
4.2	Sexual behaviour, condom use, and knowledge and perceptions of HIV/AIDS .....	57
5.	Recommendations .....	63
	References .....	66
	ANNEXES .....	67
Annex 1	Survey form (English) .....	67

## Table of tables

Table 1 BSS and seroprevalance study indicators.....	5
Table 2. Sample population participated in interview and/or HIV test.....	17
Table 3. Percentage of sex workers who work only in Suriname as compared to those who have working experience in more countries. ....	26
Table 4. Percentage of sex workers who received free condoms in 2009 and in 2011/2.....	29
Table 5. Number and percentage of sex workers who received free condoms from specific places, institutions, and people in the year prior to the interview (N <sub>total</sub> = 317).....	30
Table 6. Opinions of sex workers (number and percentage) about the free condoms they had received from an outreach programme, medical facility, or employer (N <sub>total</sub> =246) .....	30
Table 7. Percentages of women and men who report condom use during their latest vaginal, oral, or anal sexual contact with a client .....	31
Table 8. Answer to the question: "Have you consistently used condoms when having sex with clients during the month prior to this interview?" .....	32
Table 9. Answer to the question: "Have you consistently used condoms with your steady partner(s) during the month prior to this interview?" .....	32
Table 10. Test of knowledge of the most common misconceptions about HIV transmission .....	45
Table 11. Percentage of sex workers who both correctly identify using a condom as the best way to prevent the sexual transmission of HIV and who reject three major misconceptions about HIV transmission.....	45
Table 12. Type of medical insurance used by surveyed sex workers (N <sub>total</sub> = 314).....	49
Table 13. Percentages of sex workers who have received HIV/AIDS information from different sources in the 12 months preceding the interview (N <sub>total</sub> =317)* .....	51
Table 14. Number and percentage of sex workers who identified a specific site as a place for HIV testing (N <sub>total</sub> =317).....	52
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 <sub>total</sub> =317) .....	53
Table 16. Organizations, services and programmes that provide sexual reproductive health services and/or specific HIV services in Suriname.....	55
Table 17. Factors effecting decisions of sex workers to consistently use condoms.....	58
Table 18. BSS and seroprevalance study Indicators .....	61

## Table of figures

Figure 1. Suriname, South America .....	11
Figure 2. Number of HIV-positive cases by gender, 2004-2007 .....	12
Figure 3. Study locations in Paramaribo .....	15
Figure 4. Sample population for the seroprevalence study.....	17
Figure 5. Number of sex workers interviewed in different locations .....	18
Figure 6. Sample population of surveyed sex workers by nationality and sex.....	21
Figure 7. Sex workers who had used a condom the first time having paid sex.....	22
Figure 8. Level of education.....	23
Figure 9. Share of sex workers in partnership relations, with their duration.....	24
Figure 10. Number of children/family members supported by sex worker .....	25
Figure 11. Sex workers and clients they serve.....	26
Figure 12. Locations where male and female sex workers solicit their clients .....	27
<i>Figure 13. Locations where male and female sex workers have sex with their clients.....</i>	<i>28</i>
Figure 14. Places from where sex workers usually get or buy their condoms (N <sub>total</sub> =317).....	28
Figure 15. Percentages of sex workers who had experienced specific problems with condoms in the month prior to the survey (N <sub>total</sub> =317).....	33
Figure 16. Reactions and actions following condom failure (N <sub>total</sub> =318) .....	34
Figure 17. "Red-and-black" (ampicillin) antibiotics used by Guyanese sex workers .....	35
Figure 18. Example of spermicidal suppositories or "ovules" .....	35
Figure 19. Places from where sex workers have received information about how to properly put on a condom (N <sub>total</sub> =318) .....	37
Figure 20. Percentages of male (N <sub>total</sub> =60) and female (N <sub>total</sub> =244) sex workers who "never", "sometimes", "almost every time", or "always" use water-based lubricant (N <sub>total</sub> =304).....	38
Figure 21. Percentages of respondents who "never", "sometimes", "almost every time", or "always" use two condoms on top of one another (N <sub>total</sub> =312).....	38
Figure 22. Percentages of female sex workers who use herbal washes or steam baths to make the vagina tight and dry, by nationality (N=255).....	40
Figure 23. Alcohol consumption during working hours among sex workers, amount per working night/day (N=310).....	41
Figure 24. Percentages of sex workers who had experienced violence from sexual partners in the year prior to the interview (N <sub>total</sub> =316) .....	42
Figure 25. Reasons named for being at risk of HIV infection (N=121).....	43
Figure 26. Reasons named by sex workers for not being at risk for HIV infection (N=180) .....	44
Figure 27. HIV transmission venues other than sex named by sex workers (N <sub>total</sub> =317).....	46
Figure 28. Response to pregnancy among female sex workers who had been pregnant in the year receding the study .....	48
Figure 29. Percentages of sex workers from different countries and the way they pay for their pay for their health expenses*.....	50
Figure 30. Free and paid VCT sites and other HIV test locations in Paramaribo .....	52

# 1. Introduction

## 1.1 Study Aims and Objectives

This report presents the results of a study on the behaviour, attitude, values and beliefs regarding safe and unsafe sexual practices among male and female sex workers in Paramaribo, Suriname, South America. The study also provides seroprevalence<sup>2</sup> data for different sub groups of sex workers.

Despite significant financial injections in programmes to combat HIV/AIDS and signs of major progress worldwide, HIV/AIDS remains among the most persistent and worrisome development problems of the 21st century. The presence of HIV/AIDS reduces life expectancies, slows economic growth, and deepens household poverty (UNAIDS 2008). This is particularly true in low- and middle income countries, where access to quality health care, Voluntary Counselling and Testing (VTC) facilities, healthy food, and Anti Retro Viral (ARV) treatment are relatively limited, especially for the poor.

In order to better guide sparse resources for interventions and to measure the progress of targeted interventions, it is necessary to learn more about sexual behaviour, knowledge of HIV/AIDS, and seroprevalence, particularly among Most At Risk populations (MARPs).

The objectives of the present study are to:

- Identify, locate, and map clubs, bars, and houses for sex workers, sex workers hustling zones, and other locations where sex workers solicit or have sexual contact with (potential) clients.
- Sketch a demographic and socio-economic profile of female and male sex workers active in Paramaribo
- Provide a better understanding of sexual practices, sexual risk behaviours, condom usage, knowledge on HIV/AIDS, and working conditions among different subgroups of sex workers by means of a Behavioural Surveillance Survey (BSS). The various subgroups will be identified on the basis of sex, nationality/ethnicity, working location (street, club, massage salon), and other possibly relevant factors.
- Provide an informed estimate of HIV prevalence among different subgroups of sex workers in Paramaribo.

## 1.2 Commissioning agency and beneficiaries

The present survey among sex workers is part of Suriname's National AIDS Programme (NAP) on-going five year plan to monitor and fight the HIV/AIDS pandemic. The survey was funded by the Global Fund programme for "Reducing the Spread and impact of HIV/AIDS in Suriname through expansion of prevention and support programmes". The goal of this five year programme is to strengthen the Ministry's national HIV strategic plan with an aim to 'reduce the further spread and minimize the negative consequences of HIV/AIDS'. One of the objectives of the proposal is 'to promote the adoption

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<sup>2</sup> Seroprevalence = the number of persons in a population who test positive for a specific disease based on serology (blood serum) specimens.

of safer sex behaviours through the design and implementation of combined behaviour change interventions'.

It is expected that the presented analysis and recommendations will help the NAP design more effective intervention campaigns aimed at reducing the spread of HIV/AIDS among both sex workers and their clients. The sex worker population may benefit from the study if recommendations are implemented through sexual health services that target this group. A fierce and continuous response to the HIV/AIDS pandemic is critical to progress towards Millennium Development Goals (MDG) no. 6—to halt and begin to reverse the global HIV epidemic by 2015. Fighting HIV/AIDS, will also positively affect other MDGs such as the eradication of poverty, reduction of child mortality, and improvement of maternal health (UNAIDS 2008).

### 1.3 Suriname and HIV/AIDS

The Republic of Suriname (land mass: 163,820 km<sup>2</sup>) is located on the north eastern edge of South America, north of Brazil between Guyana and the French Department of La Guyane (also named French Guiana)(Figure 1). Suriname has a small (531.170 individuals) yet culturally diverse population (ABS 2010). The largest share of the population lives in the coastal area, mainly in the capital city of Paramaribo, where this study was conducted. This urban centre, with a surface of 182 km<sup>2</sup>, houses approximately half of Suriname's citizens (pop: 246,864; ABS 2008)

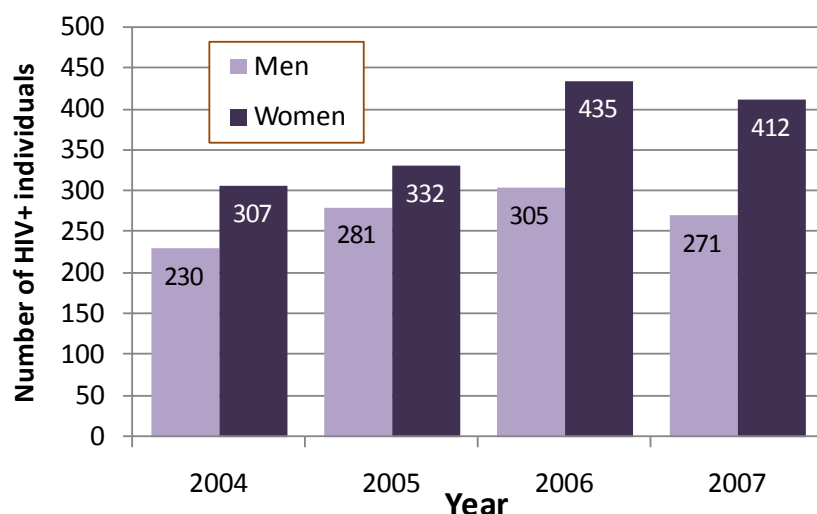


*Figure 1. Suriname, South America*

Since 2002, after years of rising numbers of AIDS-related death, AIDS mortality rates are fluctuating around 90 cases/yr for men (with an exceptional peak in 2005) and 55 cases/yr for women. In 1997 HIV/AIDS was rated 10<sup>th</sup> on the list of most frequent causes of death in Suriname. A few years later, between 2003 and 2005, HIV/AIDS moved to the 5<sup>th</sup> place. In 2006 and 2007, HIV/AIDS ranked 6<sup>th</sup> on the list of most frequent causes of death. The year 2007 marks the first year with a decrease in the number of sero-positive men and women (Figure 2). At this time in Suriname, 85 men and 57 women died of the consequences of AIDS.

Because HIV/AIDS knowledge has been measured in different ways in different subgroups, it is difficult to obtain a good impression of HIV prevention knowledge in the general population. According to the 2006 Multiple Indicator Cluster Survey (MICS), 39.3 percent of women of reproductive age (15-49) had correct knowledge of HIV/AIDS transmission. This means that during the interview, they were able to name at least two ways to prevent infection with HIV/AIDS and correctly identified at least three misconceptions. This survey found that knowledge is most accurate in urban areas (43.3%) and lowest in the interior (17.3%).

Figure 2. Number of HIV-positive cases by gender, 2004-2007



Source: ABS 2009: Selected Gender statistics

## 1.4 Most At Risk Populations (MARPs) and HIV/AIDS in Suriname

In order to halt and reverse the spread of HIV/AIDS, it is important to gather strategic information that helps us to understand transmission dynamics. For this reason it is important to determine the ‘drivers’ of the epidemic. ‘Drivers’ are the population groups which have high levels of risk behaviour, are relatively large in size and have a high prevalence rate. These population groups can also serve as a bridge to the general population. Once these populations are identified and additional behavioural information has been gathered, targeted prevention interventions can be designed and implemented, and progress can be monitored (Protocol, Nov. 2010).

The estimated adult (15-49 years) seroprevalence in Suriname is 1 percent (Ministry of Health 2010). This figure is higher among MARPs, subgroups of the population whose specific behaviour 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 sex workers, clients of sex workers, prisoners, and gold miners (ibid.). Earlier Behavioural Surveillance and Seroprevalence Surveys among MARPs justify placing particular emphasis on these groups in outreach and monitoring activities.

This study focuses on one particular group of MARPs, namely sex workers. 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 least opportunity to negotiate condom use (CAREC/PAHO and Maxi Linder Foundation 2005). Street workers are also more likely than other sex workers to use drugs (Heemskerk and Uiterloo 2009)

which, as the present study confirms, may interfere with sexual behaviour and condom use. 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 Department of Dermatology and get checked bi-weekly for sexually transmitted infections (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 and one club has started the registration procedures.

Surveys among commercial sex workers in Paramaribo found prevalence rates of 24.6 percent in 2004 (CAREC/PAHO and SMLA 2005b) and 7.2 percent in 2009 (Heemskerk and Uiterloo 2009). A 2008 seroprevalence survey among sex workers in two border districts of Suriname found prevalence rates of 2.1 percent at the western border and 4.9 percent at the eastern border (PAHO et. al 2009). HIV prevalence rates for male sex workers tend to be much higher than prevalence rates for female sex workers. The above mentioned 2004 survey in Paramaribo found an HIV prevalence rate among male sex workers of 36.2 percent and nine out of thirteen male sex workers tested HIV-positive in 2009<sup>3</sup> (Heemskerk and Uiterloo 2009). The seroprevalence survey in the border districts found two out of the three tested male sex workers HIV-positive<sup>4</sup>. The 2009 seroprevalence study among sex workers concluded that seroprevalence rates were much higher among street workers than among sex workers working in clubs, bars, and salons. Results from the present study are consistent with this finding. All listed studies suggest inconsistent condom use and a high level of interaction of MARPs with the general population.

## 1.5 Study outline

The subsequent sections 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. These include: 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 draw conclusions. The final chapter 5 contains recommendations.

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<sup>3</sup> The number of male sex workers participating in this study was too low, for the HIV prevalence of this sub group to be of any added value.

<sup>4</sup> The number of male sex workers participating in this study was too low, for the HIV prevalence of this sub group to be of any added value.



## 2. Methods

### 2.1 Study period and locations

Field work began in November 2011. At this time a behavioural surveillance survey was conducted with 228 sex workers in clubs, streets, and massage salons of greater Paramaribo. In January and February 2012, when HIV test material became available, an additional 89 sex workers were interviewed and 191 sex workers participated in a seroprevalence study.

The survey and seroprevalence study were conducted with male and female sex workers in different types of locations; outdoors spaces (streets and squares), clubs where sex workers are living, clubs and bars where sex workers come to find clients, and massage salons (Figure 3). In addition, sex workers who were part of the interviewers' social network were interviewed at their own homes or at an arranged location. Of the seven clubs that were visited by the research team, only one was registered for bi-weekly health controls by the Department of Dermatology, and one newly opened club just submitted a request to join this programme. All other clubs were not registered and operating informally. Figure 3 shows the locations in greater Paramaribo city where sex workers were interviewed and/or tested.

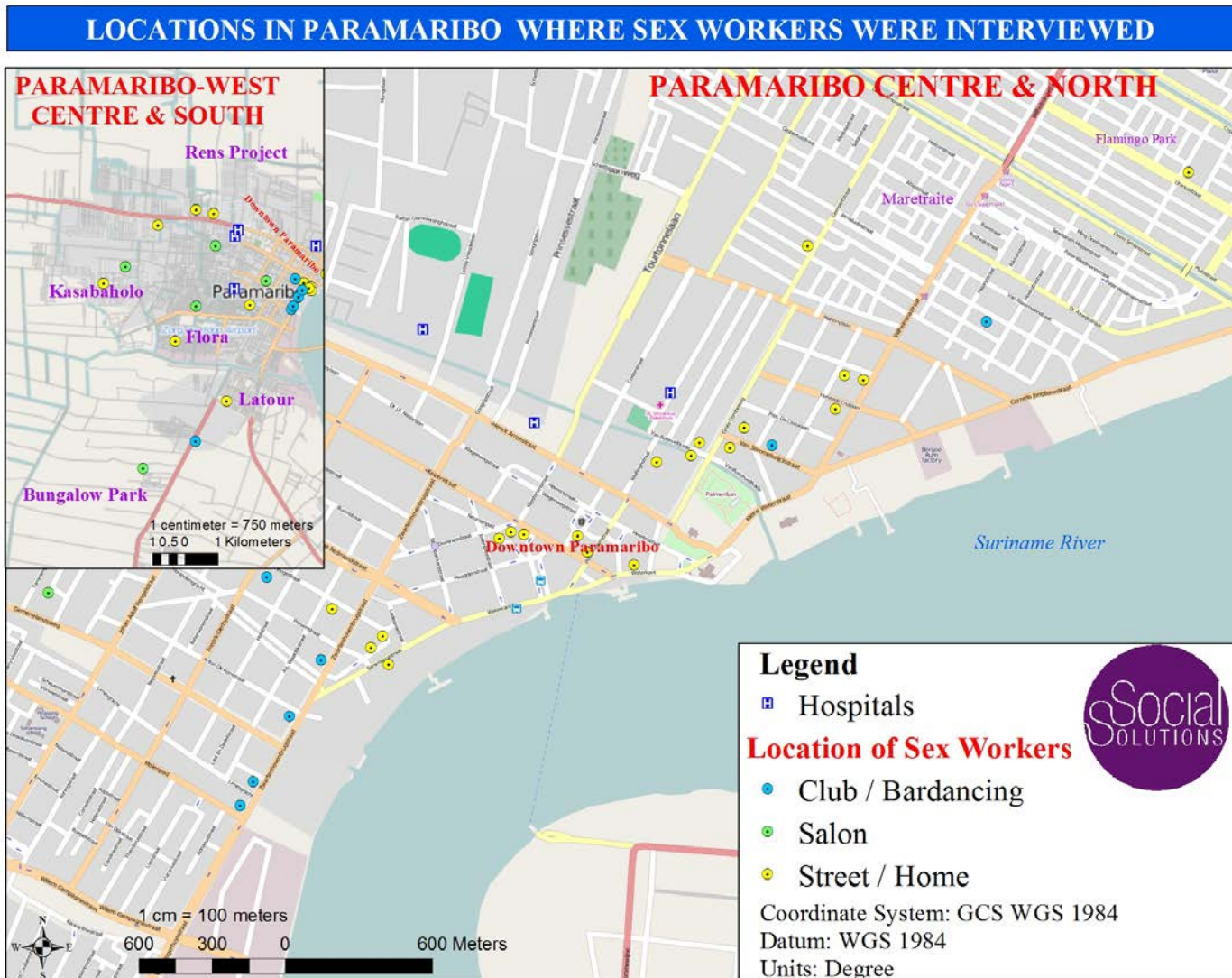
### 2.2 Study population

The study population consisted of female, male, and transvestite sex workers in Paramaribo. We define a sex worker as any man or woman who involves in sexual acts against prior agreed upon payment in cash or kind with someone with whom the person has no further partner relationship. 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 client. Excluded from this study are 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). 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 STIs, and other relevant factors. Based on our earlier studies (Heemskerk and Uiterloo 2009, Heemskerk, Duijves and Uiterloo 2011) we distinguished as different sub-groups within the target population:

- Local sex workers walking the streets (tippelen)
- Foreign sex workers walking the streets
- Sex workers working from home
- Brazilian, Dominican, and other Latin American 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

Figure 3. Study locations in Paramaribo



### 2.3 Sampling strategy and sample

Taking a random sample of sex workers is impossible because sex workers and their working locations are mostly unregistered. Moreover, their work is typically informal and some sex workers may be inclined to hide their job. The sample design captures the diversity in sex workers experiences. A conscious effort was made to interview and test sex workers of the different subgroups and the various identified locations. We were not always successful in doing so. The subgroups not interviewed include:

- (a) 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.
- (b) Men and women working for an escort service. Various escort services that advertise in local newspapers were approached by phone but none revealed their location or agreed to participation in the study.

Each sex worker who both responded to the survey questions and took the HIV test received a USD 10- mobile phone recharge card. Those who only participated in one of these study activities received a mobile phone recharge card worth USD 5-.

In order to locate, interview and test street workers, we worked with surveyors who were familiar with the target group and had knowledge of their way of work. With them we drove to selected neighbourhoods in the NAP mobile clinic or in a minivan that served as a mobile VCT site. Sex workers were approached with the request to participate. Those who agreed were taken apart to be interviewed, and tested inside the mobile clinic or the blinded minivan. This approach allowed the research team to interview and test research participants on the spot and required only minimal time and effort from the sex workers.

One problem was that some sex workers, attracted by the 10 USD reward, came twice for an interview and test. These people were refused if they were recognized by the surveyors and/or testers. Once the data were entered, cases with the same person code and certain similarities in their responses were deleted from the dataset. We cannot, however, eliminate the possibility that some individuals slipped through by using another personal code (initials and/or year of birth). Once we more regularly encountered the same people, we stopped going out in the streets in order to minimize pollution of the sample.

In the clubs, bars, and salons we first talked to the owner or manager. Upon receiving permission, we would agree on a date and time to return. In some cases the owner/manager informed the women, while in other cases it was left up to the research team to do so.

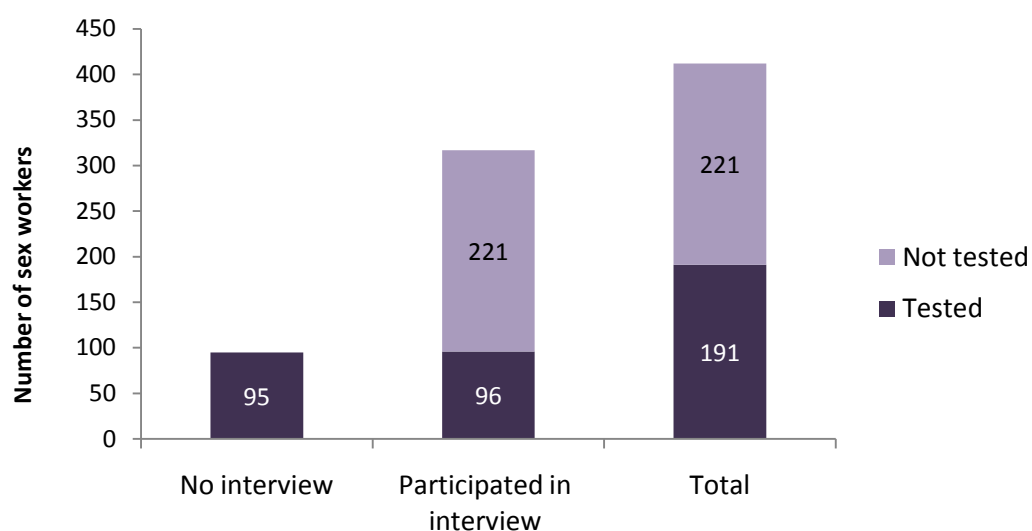
In the original work plan it was proposed to seek the participation of 200 female and 25 male CSW. We initially surveyed a total of 319 sex workers. Two cases were deleted from the dataset because the sex worker had left prior to completing the interview. Of the 317 remaining sex workers, 255 (80.4%) were women and 62 (19.6%) were men. Ninety-six surveyed sex workers also did an HIV test. Another 95 persons only performed the HIV test. A total of 191 persons participated in the seroprevalence study, among whom 178 women and 13 men (Table 2 & Figure 4). Both samples

displayed a diversity of nationalities; Dominican, Suriname, Guyanese, Brazilian, Colombian, Venezuelan and one sex worker with the Dutch nationality.

*Table 2. Sample population participated in interview and/or HIV test*

	HIV-Tested	Not tested
No interview	95	0
Participated in the BSS interview	96	221
Total (N <sub>total</sub> =412)	191	221

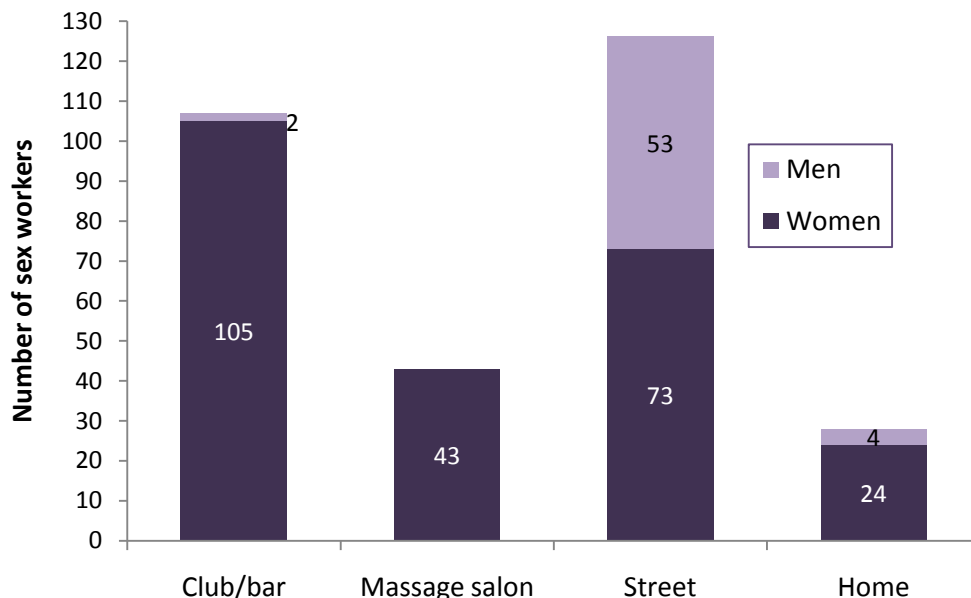
*Figure 4. Sample population for the seroprevalence study*



The research team was able to conduct interviews in a relatively wide variety of locations, such as clubs and bars of different styles, massage salons, the street, and at the person’s home or an agreed upon location. The majority of male sex workers were interviewed during working hours as they were walking the street (89.8%). Other men were interviewed at a club or bar (3.4%) or at their own home or an agreed location (6.8%; N<sub>total</sub>=59). Female sex workers were interviewed in a club or bar (42.9%), in the street 30.0%, in a salon 17.4% or at a house or home (9.7%) N<sub>total</sub>=247 (Figure 5).

The refusal rate in this research remains unknown because in addition to saying ‘No’ to our request for participation, sex workers also could just stay out of our way. Also, when the owner of a club or bar refused, we could not tell how many sex workers we missed as a result. It is possible that the non-participating group introduced some bias in our sample but we cannot tell the nature of that bias. For example, a possible confounding factor is that some sex workers who already knew that they were HIV-positive did not want to participate in the seroprevalence study. Nevertheless, keeping these limitations in mind, we believe that our sample provides a reasonably factual picture of the Paramaribo sex workers’ population.

Figure 5. Number of sex workers interviewed in different locations



## 2.4 Survey and VCT procedures

A draft survey form was designed based on the 2009 Behavioural Surveillance Survey (BSS). The 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. Standard global HIV/AIDS indicators were used as a guideline to allow for comparison of the results with those of studies among other MARPs, studies in the general population, and studies in other countries.

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. The final survey form is attached as Annex 1.

Because we were conducting a specific research project outside of the regular national testing procedures, the National AIDS Programme did not request that the research team to follow the standard VCT procedures. Our approach differed from the regular VCT procedures in that we;

- (a) Did not ask all questions from the VCT form as most were already asked in the interview,
- (b) Did not perform full-length counselling because it would draw too much attention to the positive cases. Instead HIV+ people were referred to the Department of Dermatology when their colleagues were not around
- (c) Did not leave a copy of the testing forms with NAP, Stichting Maxi Linder Association (SMLA), or any other organization.

Certified VCT health workers from the Suriname Department of Dermatology tested sex workers at the indoor places and the mobile (minivan) test site. For testing in clubs, the team relied on a VCT specialist who was fluent in Spanish and Portuguese, the languages most frequently used in these establishments.

## **2.5 Protection of Human Subjects and Ethical Review**

Research procedures adhered to professional ethical standards. Prior to conducting survey interview, the interviewee was approached in an unobtrusive manner. The surveyor introduced him or herself and explained the purpose of the research. We emphasized that participation was anonymous; that the results would be treated confidentially; that the HIV-test results would not be revealed to anyone other than the person tested. We informed the participant that the participation was voluntary and that the person would be compensated for his or her time with a USD 5- mobile phone card for each part of the research.

No names have been recorded. 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 will not be revealed in a way that can be linked to their person. All data has been presented in an aggravated manner.

## **2.6 Data analysis**

Survey data were entered in the statistical software package SPSS. The data were cleaned and cross-checked by running test analyses. 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  $N_{total}$ .

## **2.7 Research team**

The research has been executed by the consulting firm Social Solutions. 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 were fluent in Dutch, English, Spanish, Portuguese, and Sranantongo.

During the field research, the lead researchers relied on the assistance of 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 target group. 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.

## 2.8 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 Paramaribo. 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.
- **Non-compliance of Chinese sex workers and escort services.** 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. Also escort services were unwilling to allow access to their workers.
- **Colombian and Venezuelan and Dutch sex workers.** Colombian and Venezuelan sex workers were rarely working in Paramaribo at the time of the research and as a result, the final survey sample includes only four Colombian sex workers, one Venezuelans, and one Dutch sex worker. For this reason any analysis where nationality is one of the independent variables will not find relevant or representative results for the mentioned subgroups of sex workers.

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 were at work it is possible that one sex worker participated twice in the BSS and/or the seroprevalence study. Even though we did our best to prevent double interviewing and testing and removed apparent doubles from the dataset, we cannot guarantee that no other doubles are left in the data set.



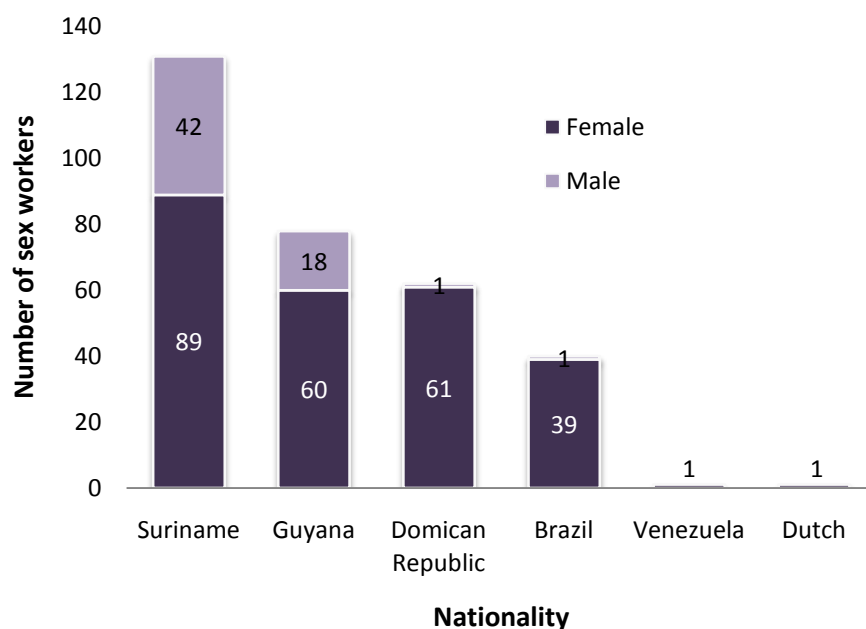
### 3. Results

#### 3.1 Demographic and social profile

The sample includes 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 29.3 years old (SD=6.9); the median age was 28 ( $N_{total}=317$ ). The large majority of sex workers in our sample (80.4%) were women, with a mean age of 29.9 and an age range between 18 and 51 ( $N_{total}=255$ ). The mean age of interviewed male sex workers was 26.7; the youngest was 17 years and the oldest 43 ( $N_{total}=62$ ). Surveyed street workers (mean age 28.8;  $N_{total}=127$ ) were, on average, younger than their colleagues in club, bars and salons (mean age 29.5). Sixteen sex workers in clubs and bars were even forty years old or older ( $N_{total}=165$ ).

The female sample population was dominated by Surinamese (34.9%), followed by Dominicans (23.9%), Guyanese (23.5%), and Brazilians (15.3%). A few individuals had other nationalities, including four Colombians (1.6%), one Dutch woman (0.4%) and one Venezuelan (0.4%). The male sex workers were primarily Surinamese (67.7%) or Guyanese (29.0%). In addition, the researchers interviewed one Brazilian and one Dominican male sex worker (both 1.6%) (Figure 6).

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



In terms of ethnicity, most sex workers identified themselves as Creole (38.2%) or of mixed ethnic background (31.5%) ( $N_{total}=317$ ). 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



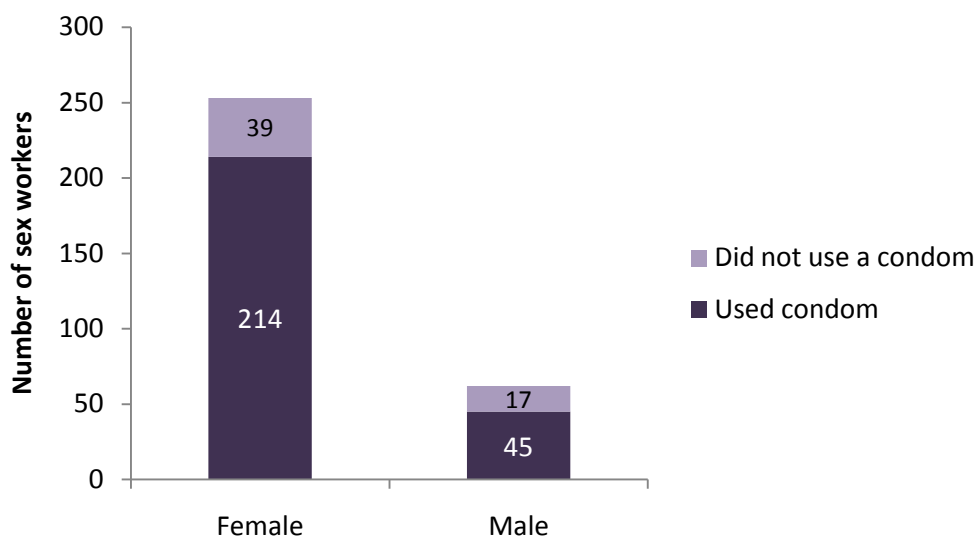
less comfortable with identification with a specific ethnic group and had more problems answering this question. Most Brazilians considered themselves mix or white (42.5% and 35%,  $N_{total}=40$ ) and Dominicans considered themselves to be mix or Creole (35.5% and 30.6%,  $N_{total}=62$ ). Most Guyanese (50%,  $N_{total}=78$ ) identified themselves as Creole.

The mean age of having paid sex for the first time is 21.7 years ( $N_{total}=317$ ). 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, seven people reported to have had their first paid sex experience when they were already in their forties; the oldest being 45.

On average, men had their first paid sex experience when they were 16.2 years old ( $N_{total}=62$ ). Female sex workers were, on average, 22.9 years old when they were first paid to have sex ( $N_{total}=255$ ). Surinamese sex workers were the youngest when they had paid sex for the first time, with a mean age of 19.1 years old ( $N_{total}=131$ ), Dominicans were on average the oldest with a mean age of 27.0 ( $N_{total}=62$ ).

Respondents were asked whether they had used a condom the first time they had been paid to have sex (Figure 7). 259 out of 315 sex workers reported that they had used a condom during their first commercial sexual experience (82.2%;  $N_{total}=315$ ). Of the Suriname sex workers only 73.1 percent ( $N_{total}=130$ ) used a condom the first time they had paid sex, this figure is low in comparison with that of Brazilian (92.5%,  $N_{total}=40$ ), Dominican (91.8%,  $N_{total}=61$ ) and Guyanese sex workers (85.9%,  $N_{total}=78$ ). When we compare men and women we see that 72.6 percent of the male sex workers used a condom the first time they had paid sex ( $N_{total}=62$ ) as compared to 84.6 percent of female sex workers ( $N_{total}=253$ ).

Figure 7. Sex workers who had used a condom the first time having paid sex

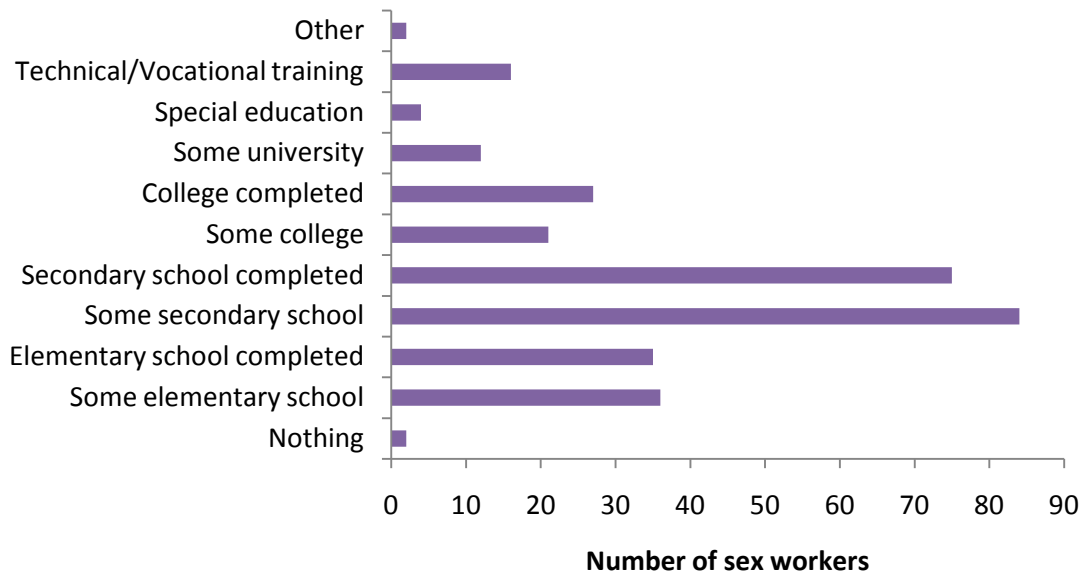


Among sex workers who have been in business for more than five years, 27.4 percent had not used a condom during their first sexual experience ( $N_{\text{total}}=179$ ). Among sex workers who more recently entered the sex business (five years or less), 'only' 5.1 percent had not used a condom during this first commercial sexual experience ( $N_{\text{total}}=136$ ). For both men and women the data suggest that consciousness of condom use has risen in the past couple of years (Figure 7).

With regard to educational achievement (Figure 8), we find that few sex workers (2 persons; 0.6%) had not received any education ( $N_{\text{total}}=317$ ). A larger group (11.4%) had some years of elementary education, and 11.0% of sex workers had completed elementary school but not moved beyond. About 26.5% of sex workers had entered secondary education -the Suriname LBGO/MULO or a foreign equivalent- but failed to complete it. 8.5 Percent of sex workers went to college (HAVO/Athenaeum) and completed it. Sixteen people had followed special or technical education. On average, sex workers had received 9 years of formal education, that is, about three years beyond elementary school but too little to obtain a high school certificate.

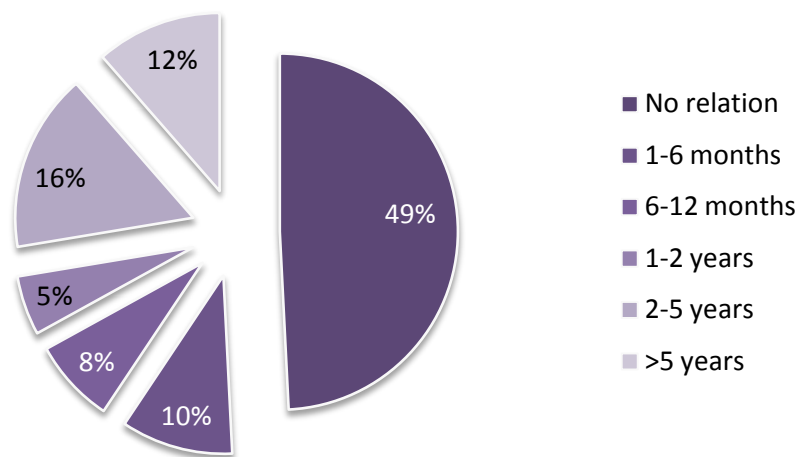
There is not much difference in educational achievement between women and men in the sample. Relatively more men than women obtained technical/vocational education; respectively 16.1 percent ( $N_{\text{total}}=62$ ) versus 2.4 percent ( $N_{\text{total}}=255$ ). There is no relation between educational levels and working location (e.g. street versus club workers).

Figure 8. Level of education



54.3 Percent of the sex workers had a steady partner ( $N_{total}=317$ ). For some (18.6%) this relationship was rather young (1-6 months) but others had been in a stable relationship for two to five years (29.7%) or even more than five years (20.9%)( $N_{total}=172$ )(Figure 9). We asked all sex workers if they had more than one non-paying partner<sup>5</sup>. 89.0 percent of respondents denied to have more than one partner and 33 sex workers affirmed that they had more than one non-paying partner ( $N_{total}=301$ ). Most of the respondents answered to have one or two non-paying partners (2.5% and 2.8%  $N_{total}=317$ ). Four sex workers had five non-paying partners (1.3%) but it cannot be ascertained if these respondents have called this number in addition to their steady partner or if they had no steady partner at all.

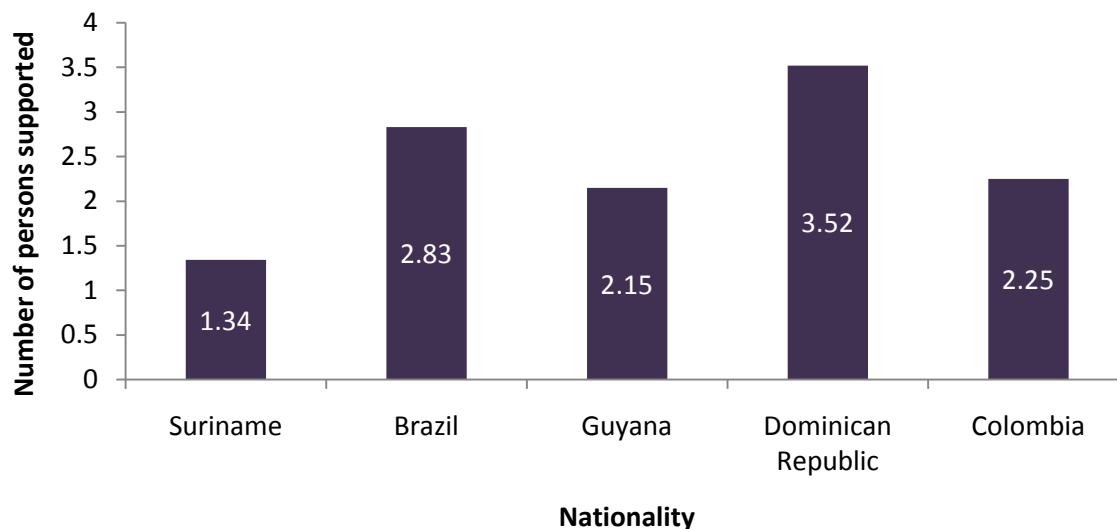
Figure 9. Share of sex workers in partnership relations, with their duration



Most sex workers supported one or more children and/or family members (70.7%,  $N=317$ ; Figure 10). 27.4 percent of the Dominicans ( $N=62$ ) support four or more children and/or family members. This is a large number in comparison to Surinamese sex workers, among whom 48.1 percent did 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 support with their wages. On average, male sex workers supported 0.4 children and/or family members while female sex workers supported, on average, 2.6 dependents (respectively  $N_{total}=62$  and  $N_{total}=255$ ). On average, Dominican women supported the largest number of children/family members with their income (3.5 dependents,  $N_{total}=61$ ).

<sup>5</sup> This question is interpreted in different ways. If answered 'yes', this suggests the sex worker has more non-paying partners besides their steady partner, which is not consistent with given answers.

Figure 10. Number of children/family members supported by sex worker



### 3.2 Working conditions

92.5 percent of female sex workers reported to be strictly servicing men, while 7.5 percent worked with men and women ( $N_{\text{total}}=254$ , Figure 11). Informal conversations with sex workers suggest 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. Twenty out of 62 surveyed men reported that they had paid sex with both men and women (37.3%;  $N=51$ )<sup>6</sup>. No-one reported serving exclusively women.

Most sex workers, 79.8 percent ( $N_{\text{total}}=317$ ), have no experience with commercial sex work across the border of Suriname, not even in their home country (Table 3). 43.6 Percent of the Guyanese ( $N=78$ ) and 35.0 percent of the Brazilians ( $N_{\text{total}}=40$ ) have been working in one or more other countries outside Suriname. For the Dominicans this is only 16.1 percent ( $N_{\text{total}}=62$ ). As compared to foreign sex workers, Surinamese sex workers were less likely to have sex work experience outside Suriname. Only four Suriname sex workers had been abroad to perform sex work (3.9%;  $N_{\text{total}}=131$ ). 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

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<sup>6</sup> 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, while others have occasional sex with females.

also had worked as a sex worker in Europe (Netherlands, Spain, Portugal, Germany, Switzerland) and/or Latin America (Venezuela, Brazil) (Table 3).

Figure 11. Sex workers and clients they serve

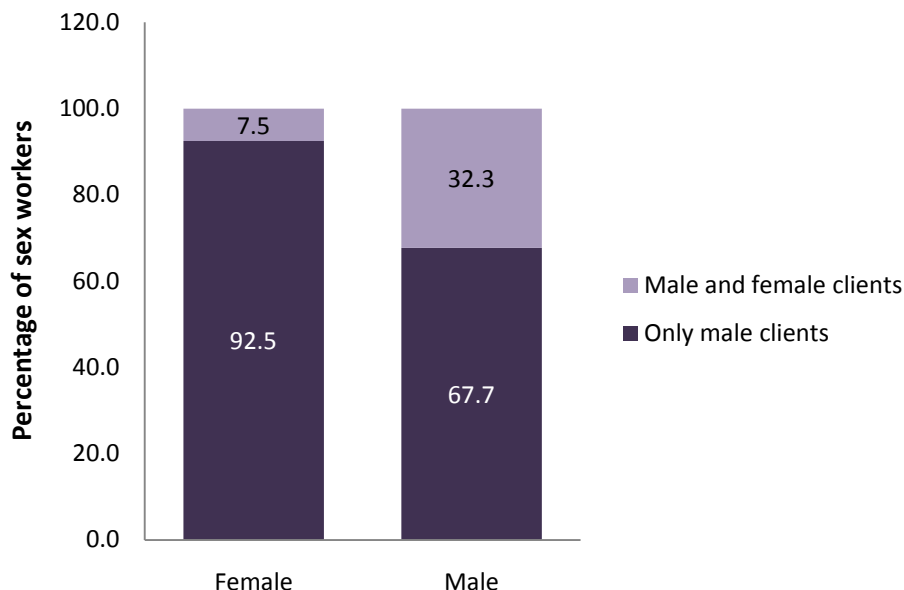


Table 3. Percentage of sex workers who work only in Suriname as compared to those who have working experience in more countries.

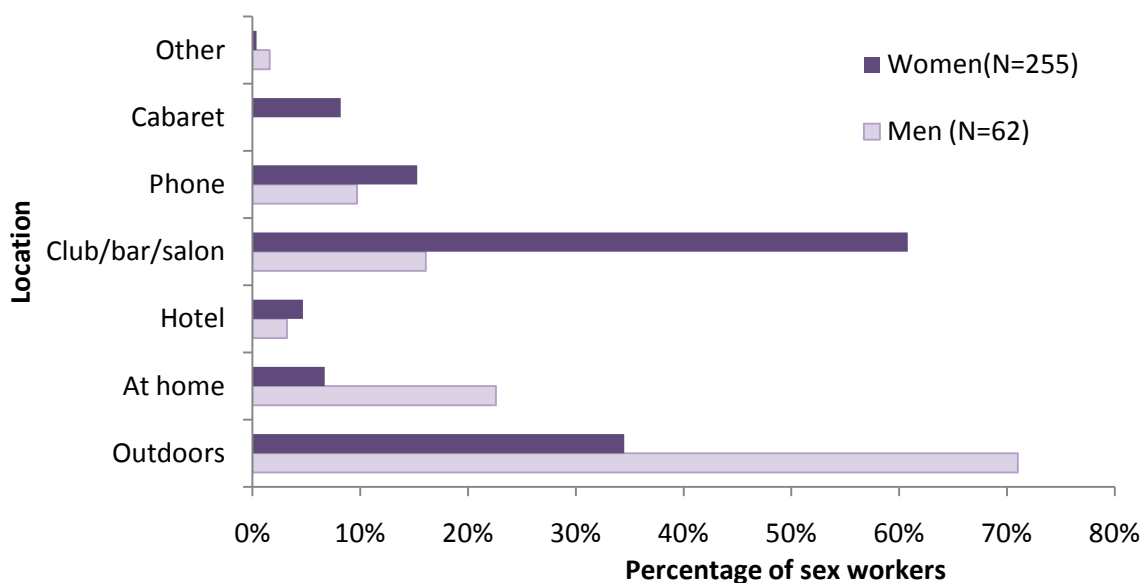
Countries worked in	Frequency	Percentage
Only in Suriname	253	79,8%
One other country	45	14,2%
Two other countries	9	2,8%
Three other countries	6	1,9%
Four other countries	3	0,9%
Five other countries	1	0,9%

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 (Figure 12). 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 (71.0%,  $N_{total}=62$ ) than their female colleagues to be walking the streets (34.5%,  $N_{total}=255$ ) whereas women are relatively more likely to work in a club, bar or massage salon (Figure 12). 21 female sex workers indicated that they also worked in cabarets in the gold fields (8.2%;  $N=255$ ). In our response group there were no men who had worked in these places. One man reported that he

found clients through the internet. No single female sex worker mentioned this venue among the sites to get into touch with clients.

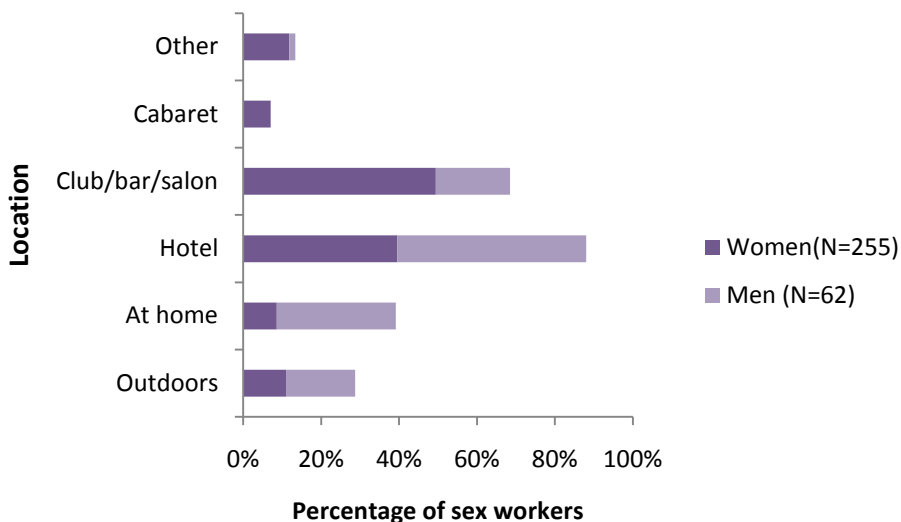
The data suggest that sex workers from certain countries are more or less likely to work in defined locations. For example Suriname and Guyanese sex workers are relatively likely to walk the streets (resp. 51.9%,  $N_{total}=131$  and 78.2%,  $N_{total}=78$ ). Brazilian and Dominican women, by contrast, are hardly ever found soliciting clients on the streets (resp. 2.6%;  $N_{total}=39$  and 1.6%;  $N_{total}=61$ ). These latter women most often worked in a club or massage salon. 97.4% percent of Brazilian woman ( $N=39$ ) and 85.2 percent of Dominican female sex workers ( $N=61$ ) found their clients in these relatively upscale indoors places. One Brazilian woman (2.6%,  $N_{total}=39$ , three Guyanese women (5.0%,  $N_{total}=60$ ) and fifteen Dominican women (24.6%,  $N_{total}=61$ ) had travelled to the gold fields to work in the cabarets.

Figure 12. Locations where male and female sex workers solicit their clients



Only 8.6 percent ( $N_{total}=255$ ) of the females had sex with clients at a private home, as compared to 30.6 percent ( $N_{total}=62$ ) of men. On the other hand, almost half of the female sex workers (47.5%;  $N_{total}=255$ ) had sex in the bar, club or salon where she worked. Both men and women brought clients to hotels (respectively 48.4%;  $N_{total}=62$  and 39.6%;  $N_{total}=255$ ; Figure 13). Most female Brazilians (92.3%,  $N=39$ ) and Dominicans (90.2%,  $N=61$ ) usually had sex in the club, bar or salon where they worked. One third (30.8%) of Brazilian women, 42.7 percent of Surinamese women, and 63.3 percent of Guyanese female sex workers (occasionally) went with their clients to a hotel to have sex (respectively:  $N_{total}=39$ ,  $N_{total}=89$  and  $N_{total}=60$ ).

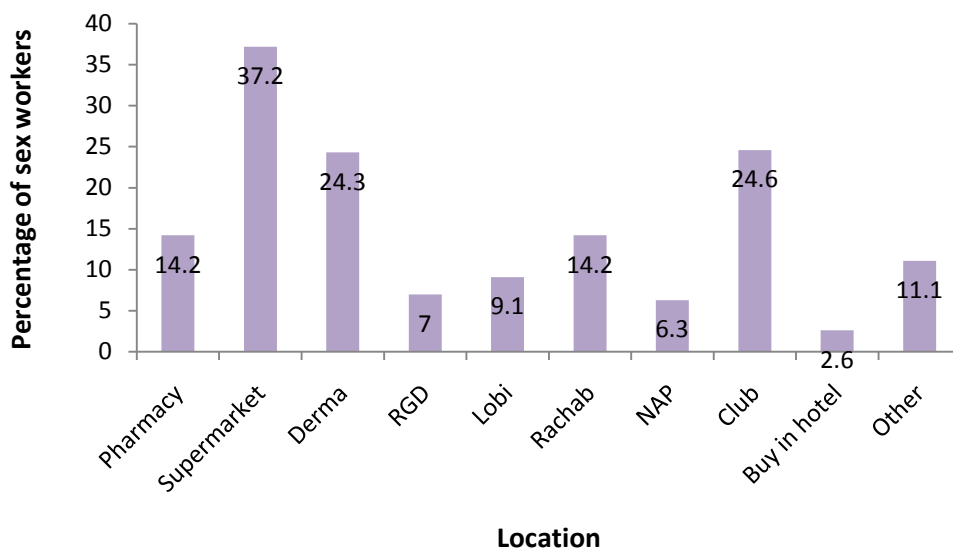
Figure 13. Locations where male and female sex workers have sex with their clients



### 3.3 Obtaining condoms

Sex workers obtain condoms from different places. Those who bought condoms, generally went to the (Chinese) supermarket (37.2%) or pharmacy (14.2%) ( $N_{total}=317$ ) (Figure 14). In addition, women who work in established clubs, bars or massage salons usually got or bought condoms in the club, bar, or salon where they work (24.6%). Other sources from where sex workers obtain condoms are mostly places that distribute condoms for free such as the Department of Dermatology (24.3%) and Foundation Rachab (14.2%).

Figure 14. Places from where sex workers usually get or buy their condoms ( $N_{total}=317$ )



We specifically asked about the receipt of free condoms in the year preceding the interview. As compared to three years ago (Heemskerk & Uiterloo 2009) we notice an increase in the percentage of sex workers who have obtained condoms from free suppliers (Table 4).

Table 4. Percentage of sex workers who received free condoms in 2009 and in 2011/2

	2009	2011
Received free condoms	32.6%	80.1%
N <sub>total</sub>	N <sub>total</sub> 259	N <sub>total</sub> 317

In the past year (2011), 80.1 percent (N<sub>total</sub> 317) of the sample population had received condoms from one of the free suppliers or outreach programmes, as compared to only 32.6 percent in 2009 (N<sub>total</sub>=259)(Table 4). Those who had received free condoms had gotten them mostly from the Department of Dermatology (26.2%), Foundation Rachab (15.8%), Lobi Foundation (10.7%) or from their employer or club owner (19.2%) (Table 5). The surveyed sex workers also named other organizations such as New Beginnings Consulting and Counseling Services (NBCCS; 0.9%), Foundation *Liefdevolle Handen* (0.6%), and non specified organizations (4.7%). A few sex workers (1.9%) obtained free condoms from a foreign country. It must be mentioned that NBCCS executes outreach activities for the National AIDS country Program and Lobi Foundation. Hence sex workers naming these organizations may in fact have been approached by NBCCS.

Sex workers who solicit their clients on the street obtained their free condoms mostly from the Foundation Rachab (31.8%), the Department of Dermatology (21.2%) and Lobi Foundation (16.7%) (N<sub>total</sub>=132). Sex workers in clubs, bars and salons most often got free condoms from their employer (30.9%) or the Department of Dermatology (28.5%). In the year prior to the interview, 18.9 percent of the street sex workers (N<sub>total</sub>= 132) and 21.8 percent of the sex workers in club, bars and salons (N<sub>total</sub>= 165) mentioned that they had not received free condoms.

Hundred and seventy-six respondents (71.5%) appreciated the free condoms (Table 6). Those who were not content with the free condoms complained that the free condoms were too dry (8.9 %), too thin (7.7%), too tight (3.3%) or had an unpleasant odour (4.9%) (N<sub>total</sub>=246).



Table 5. Number and percentage of sex workers who received free condoms from specific places, institutions, and people in the year prior to the interview ( $N_{total}= 317$ )

Source of free condoms	Frequency	Percentage
Derma	83	26.2%
Foundation Rachab (SMLA)	50	15.8%
Lobi Foundation	11	35%
Club/bar/employer	61	19.2%
RGD	23	7.3%
NBCCS	3	0.9%
NAP	16	5.0%
Undefined organization	15	4.7%
Unidentified people ("e.g. "white people, interns, "a girl")	6	1.9%
Hospital	1	0.3%
In home country/abroad	6	1.9%
Gay house	1	0.3%
Pharmacy	4	1.3
Stg. Liefdevolle handen	2	0.6%
Suriname Men United	1	0.3%

Table 6. Opinions of sex workers (number and percentage) about the free condoms they had received from an outreach programme, medical facility, or employer ( $N_{total}=246$ )

Opinion about free condoms	Frequency	Percentage
Fine	176	71.5%
Too Dry	22	8.9%
Too Thin	19	7.7%
Unpleasant odor	12	4.9%
Too Tight	8	3.1%
Too Thick	2	0.8%
Gives irritation	2	0.8%
Other opinion	5	2.0%

### 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 275 sex workers who offered commercial vaginal sex, 270 answered the question: “the last time you had vaginal sex with a client, did you use a condom?”. Of these 270 sex workers, only one male and one female sex worker responded that they had not used a condom the last time they had been paid to have vaginal sex (respectively 4.8%  $N_{total}=21$ ; 0.4%  $N_{total}=249$  ).

Among the 200 sex workers who reported that they had oral sex with clients *and* who responded to the question about condom use during their latest oral sexual contact with a client, 96.0 percent answered that they had used a condom the last time they had performed oral sex with a client.

Of the 100 sex workers who performed commercial anal sex, 92 percent responded to the question about condom use during their latest anal sexual contact with a client. In this group, only one male sex worker reported that he had not used a condom (3.4%;  $N_{total}=59$ ). All women who offered anal sex to clients said that they had used a condom the last time they had done this. There is no significant difference between women and men in their self-reported condom use during the latest performance of oral or anal sex (Table 7).

*Table 7. Percentages of women and men who report condom use during their latest vaginal, oral, or anal sexual contact with a client*

	<i>Used condom during last sexual contact with a client</i>		
	Vaginal sex	Oral sex	Anal sex
<b>Men (N=62)</b>	95.2% ( $N_{total}=21$ )	97.7% ( $N_{total}=44$ )	98.2% ( $N_{total}=56$ )
<b>Women (N=255)</b>	99.6% ( $N_{total}=249$ )	95.5 % ( $N_{total}=156$ )	100% ( $N_{total}=37$ )
<b>Total (N=317)</b>	99.3% ( $N_{total}=270$ )	96.0% ( $N_{total}=200$ )	98.9% ( $N_{total}=93$ )

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, 90.6 percent of female sex workers and 86.9 percent of male sex workers reported always using a condom (Table 8). 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 7). Because we did not specify the form of sexual conduct in this question we cannot tell what share of the twelve 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 male and two females responded that they never used a condom when having sex with clients in the past month.

Among Dominican sex workers, 96.8 percent reported they had always used condoms with clients in the month prior to the interview ( $N_{total}=62$ ). Surinamese, Guyanese and Brazilian sex workers were a little less likely to report that they had always used a condom with clients in the month

preceding the interview (respectively 87.8%,  $N_{total}=131$ , 85.0%,  $N_{total}=40$  and 88.5%,  $N_{total}=78$ ). When having sex with a steady partner, condom use is less consistent (Table 9). 48.8 percent of surveyed sex workers with at least one steady non-paying partner responded that they never use condoms with their steady partner ( $N_{total}=159$ ). A quarter of sex workers reported that in the past month<sup>7</sup>, they always used condoms with their steady partner (24.5%;  $N_{total}=159$ ).

*Table 8. Answer to the question: "Have you consistently used condoms when having sex with clients during the month prior to this interview?"*

<i>Used condoms for sex with clients</i>	<i>Always</i>	<i>Almost always</i>	<i>Sometimes</i>	<i>Never</i>
<b>Female (<math>N_{total}=255</math>)</b>	90.6%	4.3%	4.3%	0.8%
<b>Male (<math>N_{total}=61</math>)</b>	86.9%	1.6%	9.8%	1.6%
<b>All (<math>N_{total}=316</math>)</b>	89.9%	3.8%	5.4%	0.9%

*Table 9. Answer to the question: "Have you consistently used condoms with your steady partner(s) during the month prior to this interview?"*

<i>Used condoms for sex with steady partner(s)</i>	<i>Always</i>	<i>Almost always</i>	<i>Sometimes</i>	<i>Never</i>
<b>Female (<math>N_{total}=140</math>)*</b>	20%	2.9%	15%	52.9%
<b>Male (<math>N_{total}=19</math>)</b>	57.9%	5.3%	10.5%	15.8%
<b>All (<math>N_{total}=159</math>)*</b>	24.5%	3.1%	14.5%	48.4%

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 57.9% versus 20.0%; Table 9). Conversely, male sex workers are less likely than female sex workers to “never” use condoms with their steady partner (respectively 15.8% versus 52.9%). One possible explanation may be that male sex workers were relatively more likely than female sex workers to have more than one ‘steady’ partner.

### 3.5 Condom failure

Using a condom reduces the chances of HIV transmission, but condoms can fail. 40.4 percent of sex workers in our sample had experienced a problem with condoms in the month prior to the interview ( $N_{total}=317$ , Figure 15). Of the 95 persons who both responded to the question about condom failure and did the HIV test, five persons were HIV+. Of these five persons, four responded

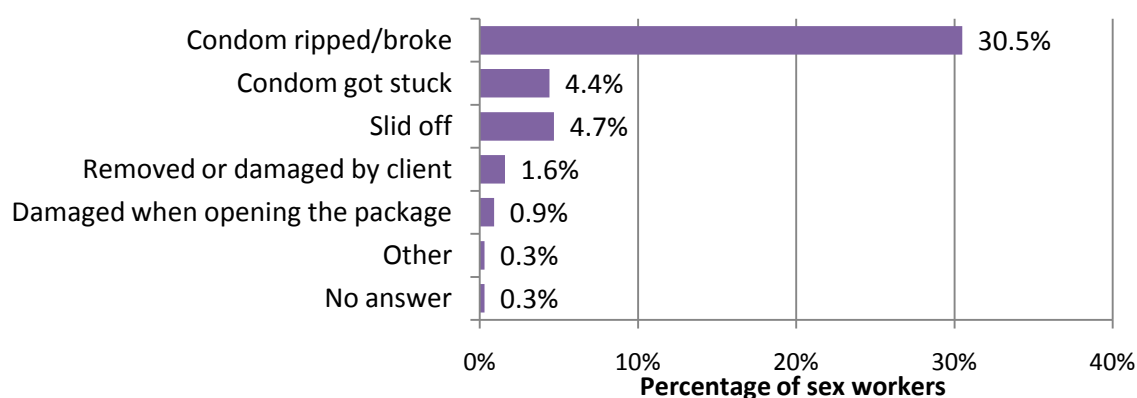
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<sup>7</sup> Several foreign sex workers had a husband or boyfriend in their home country whom they had not seen in the month prior to the interview. In those cases, we asked about condom use during sexual contact in the most recent month that they had been with their steady partner

that they had experienced problems with their condoms at least once in the month prior to the interview. Even though the sample of HIV+ individuals is too small to draw generalizing conclusions, the results do suggest that condom failure is a possible venue of HIV transmission.

The most common problem that sex workers were confronted with was that the condom had ripped or broken, which had occurred to 30.6 percent of surveyed sex workers in the month prior to the interview ( $N_{total}=317$ ). Less common problems were that the condom had slid off (4.7%), got stuck (4.4%), or had been damaged when opening the package (0.9%) ( $N_{total}=317$ ). Five sex workers reported that the condom had been secretly removed or broken by the client (1.6%;  $N_{total}=317$ )

Figure 15. Percentages of sex workers who had experienced specific problems with condoms in the month prior to the survey ( $N_{total}=317$ )



Different reactions and strategies follow condom failure (Figure 16). “Replace the condom and continue” was mentioned by 38.2 percent of sex workers ( $N_{total}=317$ ). Just over one third of interviewees responded that they would immediately wash and rinse their genital area (36.6%;  $N_{total}=318$ ). 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 were: taking antibiotics, taking an HIV test, going to the doctor, and using vaginal capsules or creams.

We find remarkable 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 (55.7%;  $N_{total}=131$ ) report to replace the condom and continue. Only Guyanese sex workers mention that they hope and/or pray for the best after they experience condom failure.

Taking oral antibiotics such as ampicillin when the condom fails was named as a coping strategy by 29.5 percent of Guyanese sex workers ( $N_{total}=78$ ) and 24.2 percent of Dominican sex workers ( $N_{total}=62$ ). The Guyanese street workers call this medication “red-and-black”, referring the physical appearance of the pills (Figure 17). Only four Brazilian woman, three Suriname sex workers, and no Colombian sex workers reportedly take antibiotics after condom failure. Dominican sex workers are relatively much more likely than others to use vaginal capsules (*ovulo*) or cream after condom

malfunction. Among Dominican women, 14.5 percent reported the use of these over-the counter vaginal medications ( $N_{total}=62$ ), versus 5 percent of Brazilian women ( $N_{total}=40$ ) and none of the other sex workers.

Because the interviewees did not provide much information on the vaginal capsules or creams they used, we cannot specify what type of medication they were referring to. It is possible that they use spermicidal tablets or suppositories as a contraceptive (Figure 17). 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 is questionable.

Figure 16. Reactions and actions following condom failure ( $N_{total} = 318$ )

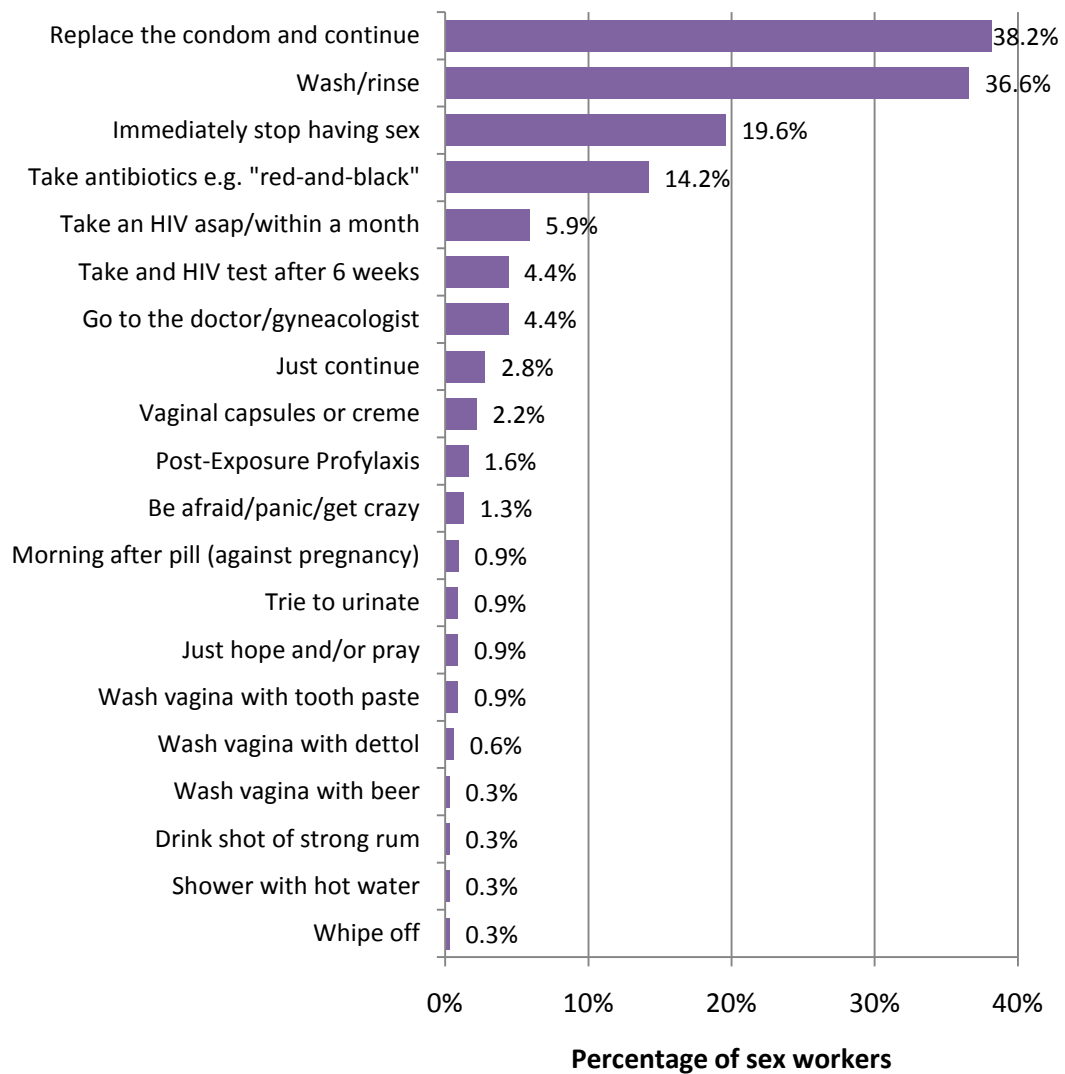


Figure 17. "Red-and-black" (ampicillin) antibiotics used by Guyanese sex workers



Figure 18. Example of spermicidal suppositories or "ovules"



It is also possible that women use vaginal creams, tablets or suppositories 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.

One 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.

Few sex workers know about the existence of Post Exposure Prophylaxis (PEP), popularly known as the morning after pill against HIV. PEP is a prophylaxis (preventative) administered after suspected HIV exposure. Post Exposure Prophylaxis, which has to be started within 72 hours after exposure, does not prevent HIV but it helps decrease the likelihood of HIV infection from the exposure. It also is not "a pill", but a 28-day long expensive treatment regime, which can have severe side effects. In Suriname, as in many other places, PEP is only offered in clinical settings to persons who had professional exposure (e.g. nurses with needle stick injuries). Because of the limited availability and rare use of PEP, we are not sure whether the five persons who reported use of the "morning after pill against HIV" really have taken this medication or whether they were confused with something else.

Only three sex workers said that they had taken 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 71.0%;  $N_{total}=62$  versus 30.2%;  $N_{total}=255$ ). On the other hand, the data suggest that men are much less likely than women to take antibiotics, go to the doctor, or wash/rinse after condom failure.

### 3.6 Conscious condom use

Every sexual encounter incorporates a certain risk, yet there are various things sex workers can do to decrease such risks. In addition to using condoms 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. Correct use means, among others, that the sex worker: (a) knows how to put on the condom correctly; (b) uses water-based lubricant (or lubricated condoms); (c) does not place two condoms on top of one another; and (d) does 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. One out of every eight respondents (12.3%) answered that they had never received any information about how to do so ( $N_{\text{total}}=317$ ). A Dominican woman who was asked to demonstrate the correct way of placing the condom did not squeeze the top-segment of the condom. This method of placing a condom allows for air to remain in the top segment of the condom and increases the chances of rupture. Wrong use of the condom is not always a consequence of ignorance though. Some sex workers know theoretically how to correctly put on a condom, but act differently for emotional reasons. 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.

Just under half of sex workers (44.5%) had obtained information about proper condom use from an outreach organization ( $N_{\text{total}}=317$ ). 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,
- New Beginnings Consulting and Counseling Services (NBCCS),
- Comforting heart (Guyana)
- Stg. Tana
- An organization in a home country or other country where they had worked.

Other important sources of information about proper condom use were school (23.0%) and family (18.9%) ( $N_{\text{total}}=317$ ). TV, internet, and written sources had taught how to correctly put on a condom to 4.7 percent of sex workers. Health workers at a VCT site or clinic were mentioned by 3.1 percent of respondents (Figure 19). Clubs also may organize information sessions; five sex workers had obtained information about correct condom use from their employer.

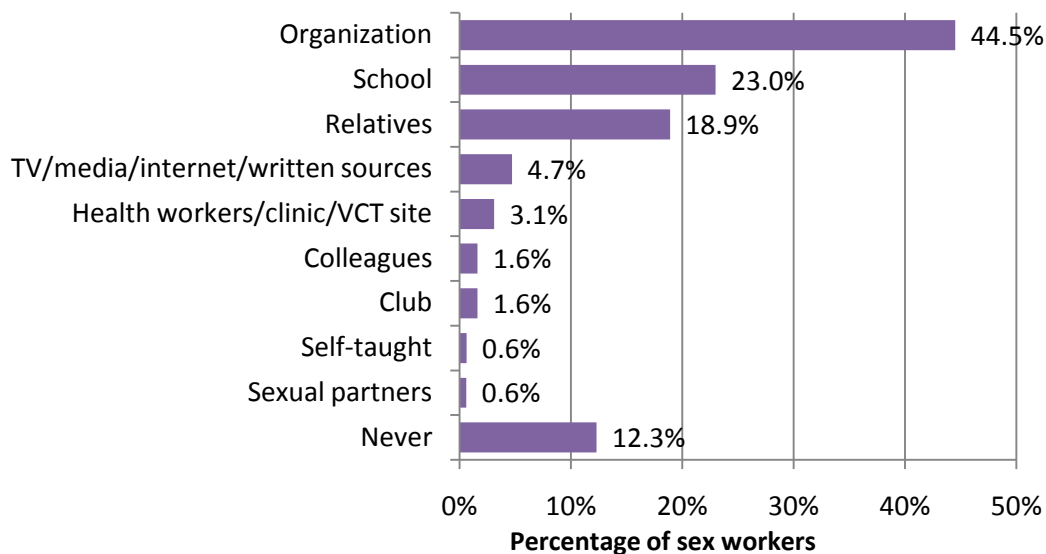
The use of water-based lubricant<sup>8</sup> is fairly common among sex workers; 44.2 percent of surveyed sex workers reported that they “always” use it ( $N_{\text{total}}=303$ ). In addition, 2.3 percent of sex workers

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<sup>8</sup> This includes both cases where the person uses a separate lubricant and where the person uses condoms that already have lubricant

used it “almost every time” and 26.7 percent “sometimes” (Figure 20). Some sex workers, however, were not 100% certain whether the lubricant they used was water or oil-based. When buying lubricant, many do not pay attention to its composition.

Figure 19. Places from where sex workers have received information about how to properly put on a condom ( $N_{total}=318$ )



The data suggest that men are more likely than women to “always”, “almost every time” or “sometimes” use water-based lubricant (Figure 20). Conversely, as compared to male sex workers, female sex workers more often reported that they “never” used lubricant. Some sex workers reported that they never used lubricant because they are allergic or because it produces itchiness. Others argued that if they use lubricant they do not feel it when 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 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”<sup>9</sup> (amyl nitrate), which relax the anus muscles and makes anal sex more comfortable. 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.

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<sup>9</sup> Refers to a small, usually brown bottle of solvents or the solvents themselves, which are sniffed.



The majority of sex workers knew that they should not use two condoms on top of one another. Almost three-quarters (72.4%) of sex workers reported that they “never” work with two condoms placed on top of one another ( $N_{total}=312$ ; Figure 21).

Figure 20. Percentages of male ( $N_{total}=60$ ) and female ( $N_{total}=244$ ) sex workers who “never”, “sometimes”, “almost every time”, or “always” use water-based lubricant ( $N_{total}=304$ ).

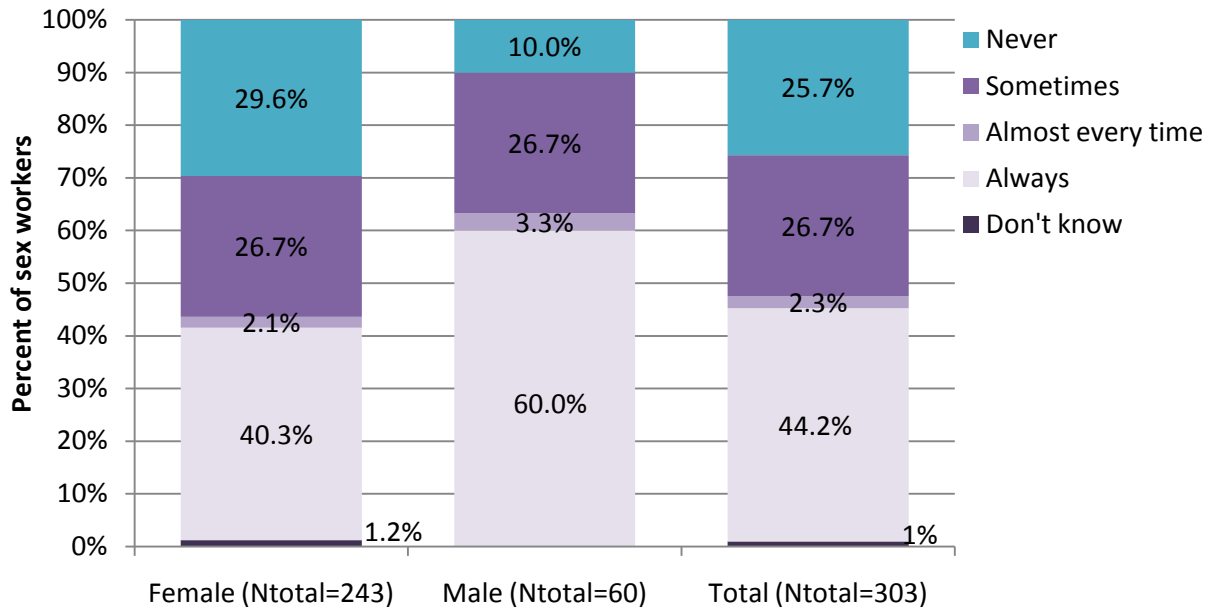
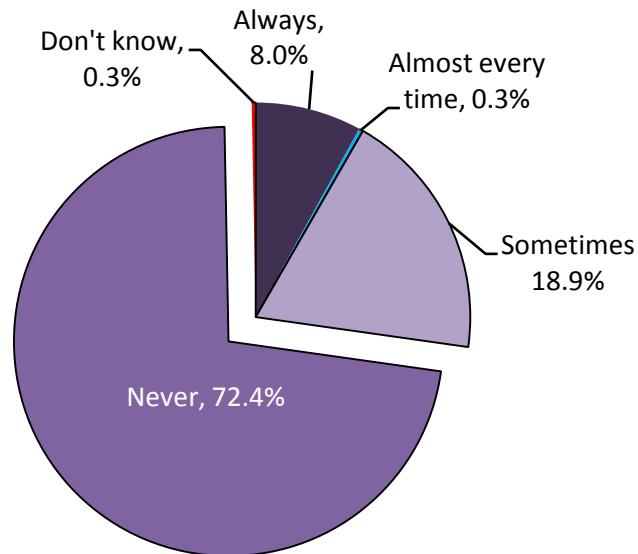


Figure 21. Percentages of respondents who “never”, “sometimes”, “almost every time”, or “always” use two condoms on top of one another ( $N_{total}=312$ ).



Of the remaining respondents, 8.0 percent reported that they “always” use two condoms at a time; 0.3 percent (one person) did so “almost every time”; and yet another 18.9 percent “sometimes” used two condoms at once ( $N_{\text{total}}=312$ ). For example, one Suriname sex worker said that she would not initiate the use of two condoms at once, but she does place an additional condom when the client asks for it. Some women explained that they were more prone to use two condoms at a time when the man had a larger penis. Once again, wrong condom use does not necessarily result from a lack of knowledge. One woman explained that she knew using two condoms at a time was wrong, yet nevertheless she felt safer doing it anyway.

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.

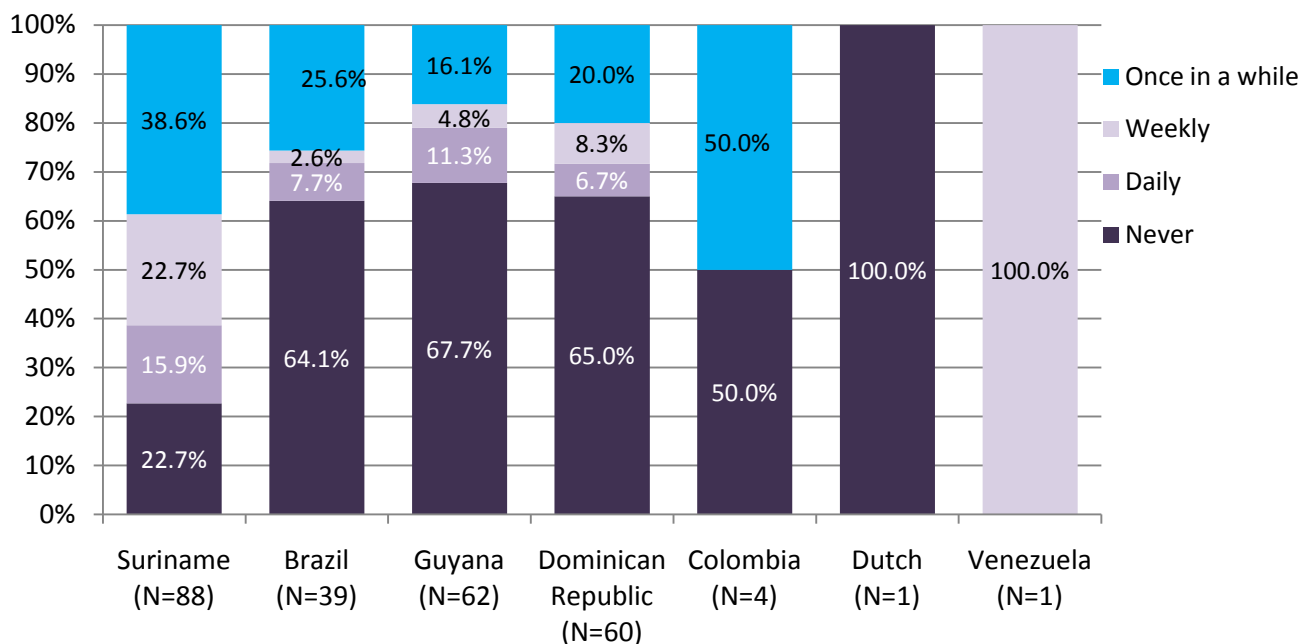
Female sex workers were asked whether they used genital herbal steam baths to become dry and tight. The responses differ considerably between women from the different countries, with Suriname women being most likely to use genital steam baths (Figure 22).

Sixteen percent of Suriname female sex workers reported that they daily washed their vagina with herbal remedies to remain tight and dry; 28.6 percent used these baths weekly; and another 39.3 percent did this once in a while ( $N=56$ ). By contrast, three quarters of Dominican and Guyanese women said that they never used herbs to make the vagina dry and tight (respectively 75.9%;  $N_{\text{total}}=54$  and 75%;  $N_{\text{total}}=40$ ). Women who used vaginal steam baths once in a while did so typically just after their menstruation.

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 used local herbs but some foreign sex workers obtained herbal washes from their home country.

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 merely 29.9 percent (92 persons,  $N_{\text{total}}=308$ ) 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.

Figure 22. Percentages of female sex workers who use herbal washes or steam baths to make the vagina tight and dry, by nationality (N=255)



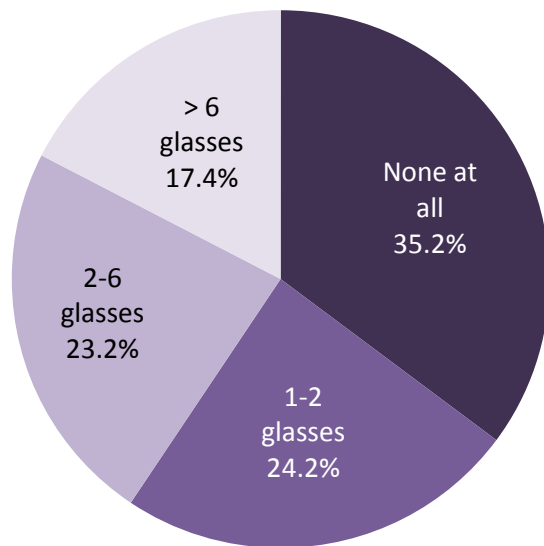
### 3.6 External factors intervening with condom use: alcohol, drugs, violence

Drugs use among sex workers is moderate but the use of alcohol is common among surveyed sex workers. From the 317 respondents, 93 (29.8%, excl. 5 missing cases) were not using alcohol or any other form of drug. Among those who reported the current use of drugs (76 individuals), twelve used cocaine, four used XTC, and 59 smoked marihuana and/or used hashish ( $N_{total}=317$ ). Seven sex workers (2.2%;  $N_{total}=317$ ) had injected drugs in the six months prior to the interview. All seven had used clean needles.

Two hundred-and-one (64.8%) sex workers in the sample reported the consumption of alcohol during working hours ( $N_{total}=310$ ). In the complete sample, 24.2 percent (75 individuals) of sex workers drank just one to two cups of alcohol on a working night or day; 23.2% ( $N=72$ ) drank three to six cups; and 17.4% ( $N=54$ ) drank more than six cups on an evening that they were at work (Figure 23). Of the 59 sex workers who used marijuana/hashish, more than half (57.6%) reported the consumption of more than 3 glasses or cans of alcohol on a working night.

The sex workers who used drugs often used a combination of drugs and alcohol. For example, of the 12 sex workers who reported the use of cocaine, five also used marijuana and 4 drank more than six cups of alcohol at working nights.

Figure 23. Alcohol consumption during working hours among sex workers, amount per working night/day (N=310).



We find no significant differences between streets workers and indoors workers in the use of alcohol, cocaine, injection drugs, or XTC. Street workers were more likely to use marijuana or hashish though; 27.8 percent of street workers versus 12.0 percent of indoors workers reported the use of marihuana/hashish ( $p < 0.001$ , Chi-square).

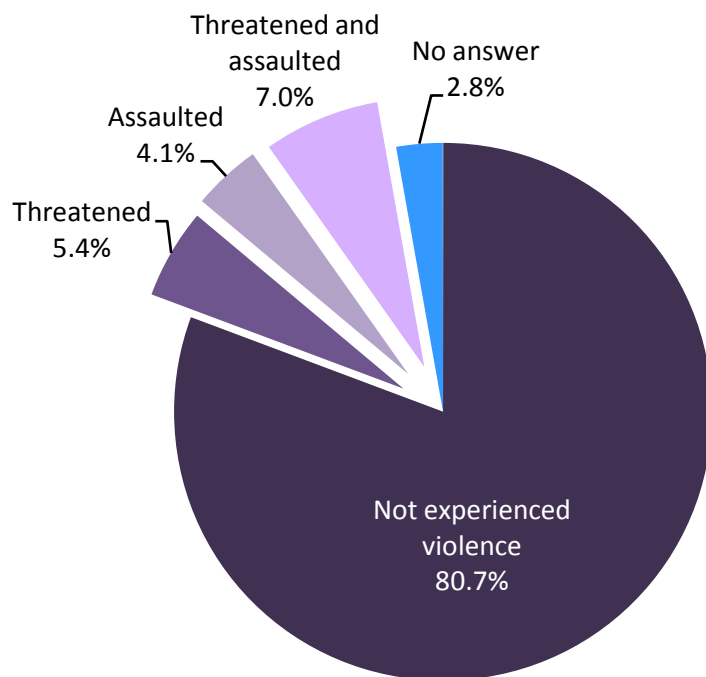
Our data suggest a relation between alcohol consumption and consistent condom use during the past month. Of the 109 sex workers who were not consuming any alcohol during working hours, 94.5 percent reported that they had “always” used a condom when they had sex with clients in the month prior to the interview. Among sex workers who drink more than six glasses of alcohol at nights that they are at work, only 84.9 percent had “always” used condoms with clients ( $N_{total}=53$ ).

The data also suggest that drugs use interferes with decisions about the use of condoms. Among marijuana users, 20.3 percent had not always used a condom during sex with a client in the month prior to the interview ( $N_{total}=59$ ). For non-marijuana users, this share was 7.8 percent ( $N_{total}=257$ ;  $p < 0.05$ , Chi-square). The number of sex workers in the sample who use hard drugs is too small to establish a significant relation between the use of hard drugs and the consistency of condom use. Nevertheless, the numbers do suggest a positive correlation between these factors. Of the twelve cocaine-users in the sample, five (41.7%) had not consistently used condoms with clients in the month prior to the interview. Among sex workers who did not use cocaine, 8.9 percent had not always used a condom in these situations ( $N_{total}=304$ ). Four sex workers (1.3%) reported that they had exchanged sex for drugs in the past year ( $N_{total}=317$ ). This group is particularly vulnerable because they may be enticed to compromise safe sex if they urgently need their drugs intake.

In addition to alcohol and drugs, another factor that might affect decision-making about safe sex is violence and fear for violence by sexual partners. The largest share of sex workers in the sample

had not experienced violence in the year preceding the interview (80.7%;  $N_{total}=316$ ). Of all sex workers in the sample, seven percent had been threatened and assaulted, 5.4 percent had been only threatened, and 4.1 percent had been only assaulted ( $N_{total}=316$ ; Figure 24).

Figure 24. Percentages of sex workers who had experienced violence from sexual partners in the year prior to the interview ( $N_{total}=316$ )

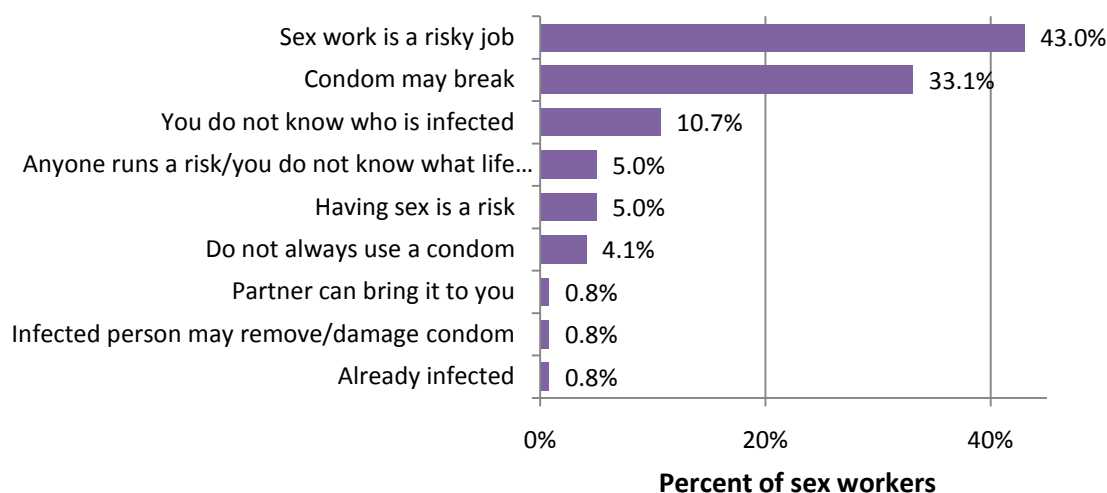


The 2009 BSS in Paramaribo revealed that street workers run relatively larger risks of confrontations with aggressive clients as compared to indoors workers. This situation has not changed. 24.1 Percent of sex workers who solicit clients in the street ( $N_{total}=133$ ) and 28.9 percent of sex workers who meet clients through phone appointments ( $N_{total}=45$ ) had experienced verbal and/or physical violence. In comparison, a much lower 13.2 percent of sex workers working indoors in clubs, bars, and massage salons ( $N_{total}=159$ ) 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 clubs and other establishments. Security personnel and owners/managers of the clubs, bars, and massage salons where sex workers work play a crucial role in creating a relatively safe work place.

### 3.7 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, 40.3 percent of interviewees answered affirmatively, that is, they believed that they were running a risk to become infected ( $N_{\text{total}}=315$ ). As compared to male sex workers ( $N_{\text{total}}=61$ ), among whom only 14.8 percent believed to be at risk, female sex workers were more likely to feel at risk of HIV infection (46.5%;  $N_{\text{total}}=254$ ). The most common reasons named by sex workers who believed to be at risk were that sex work is a risky job (43.0%) and that the condom may break (33.1%) ( $N_{\text{total}}=121$ ; Figure 25).

Figure 25. Reasons named for being at risk of HIV infection ( $N=121$ )



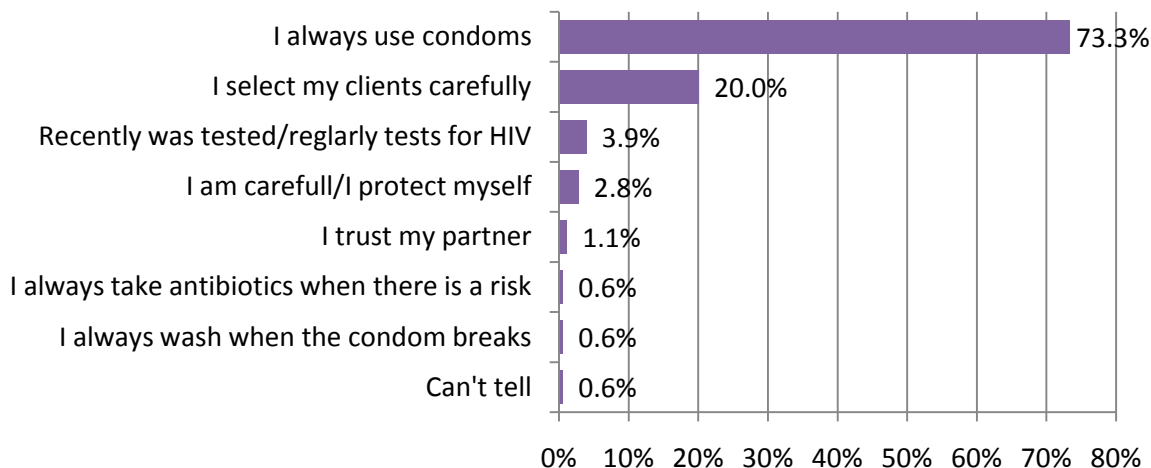
The majority of sex workers (57.2%) did not believe to be at risk of HIV infection, and 2.5 percent said that they did not know whether they were at risk ( $N_{\text{total}}=315$ ). The main reason to believe that one does not run a risk to become infected with HIV is that the person always uses a condom (73.3%;  $N_{\text{total}}=180$ , only considering the persons who believe not to be at risk).

Answers to other questions suggest that risk assessment is not consistent with actual behaviour. Among the sex workers who reported that they believed that they were not at risk because of their consistent condom use, we find that:

- Two individuals had not used a condom the last time they had vaginal sex with a client;
- One person had not used a condom the last time he/she had had anal sex with a client;
- Three persons had not used a condom the last time they had oral sex with a client.
- Seven persons from this group had not “always” used a condom when they had sex with clients in the month preceding the interview
- Two persons had “never” used a condom with clients during that period, and
- Twenty-eight persons in this group reported that they “never” used condoms with their steady partner(s) (26.9%;  $N_{\text{total}}=104$ ).

Another argument to justify low risk assessment, mentioned by 20 percent (36 individuals) of those believing not to be at risk, is that the person selects his or her clients carefully ( $N_{total}=180$ , only counting persons who believe they are not at risk; Figure 26). This finding suggests that there are still sex workers who believe that one can observe the presence of HIV infection.

Figure 26. Reasons named by sex workers for not being at risk for HIV infection ( $N=180$ )



Percentage of sex workers, among those believing not to be at risk ( $N=180$ )

### 3.8 Knowledge of HIV/AIDS

The survey included several questions to assess general knowledge of causes and prevention of HIV/AIDS. First, sex workers were asked: “What is the best way to prevent the sexual transmission of HIV when you are having sex?” In response, 96.5 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 ( $N_{total}=315$ ). The remaining 3.5 percent said they did not know. Some sex workers also named additional things one could do to diminish risk, including abstinence, monogamy, masturbation, take an HIV-test prior to having unprotected sex, avoid kissing, and be careful with the condom.

This open question was followed by four statements to which the survey participants were asked to respond with “agree” or “disagree”. The results are presented in Table 10. From other studies, it was concluded that 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 (Heemskerk and Uiterloo 2009; Heemskerk 2010). These misconceptions were rejected by a large majority of respondents. Respectively 77.6 percent, 93 percent, and 83.2 percent of surveyed sex workers disagreed with these statements. 66.5 Percent of respondents correctly rejected all three misconceptions ( $N_{total}=316$ ).

Table 10. Test of knowledge of the most common misconceptions about HIV transmission

Do you agree or disagree?	Correct answer	% Correct answer	% Don't know	N <sub>total</sub>
One can get HIV from a mosquito bite	Disagree	77.6%	7.9%	317
You run a risk of being infected with HIV if you share a meal with someone who is infected	Disagree	93%	1.9%	316
You run a risk of being infected with HIV if you use the toilet after a person who is HIV+	Disagree	83.2%	7.6%	316
A healthy-looking person can have HIV	Agree	96.5%	1.6%	315

The results reveal that when asked directly, virtually all sex workers knew that a healthy looking person may be infected with HIV/AIDS (96.5%; N<sub>total</sub>=315). This finding seems to contradict the earlier finding that 11.5 percent of all sex workers believed not to be at risk of HIV transmission because they select their clients “carefully” (N<sub>total</sub>=315).

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 Table 11.

Table 11. Percentage of sex workers who both correctly identify using a condom as the best way to prevent the sexual transmission of HIV and who reject three major misconceptions about HIV transmission.

Sample subgroup	N <sub>total</sub> (denominator)	N (Numerator)	Percentage
Total	316	210	66.5%
Female	254	155	61.0%
Male	62	55	88.7%

The data suggest a disparity between male and female sex workers in terms of their knowledge of HIV, as measured by the above indicator. Among male sex workers 88.7 percent (N<sub>total</sub>=62) correctly answered all questions, versus 61.0 percent of female sex workers (N<sub>total</sub>=254). This difference 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 85.9 percent and 76.3 percent of sex workers from Guyana (N<sub>total</sub>=78) and Suriname (N<sub>total</sub>=131) both name the condom as the best way to prevent HIV transmission *and* reject three common misconceptions. Only 41.9 percent of sex workers from the Dominican Republic (N<sub>total</sub>=62) and 40 percent of Brazilian sex workers (N<sub>total</sub>=40) knew the answers to all four questions.

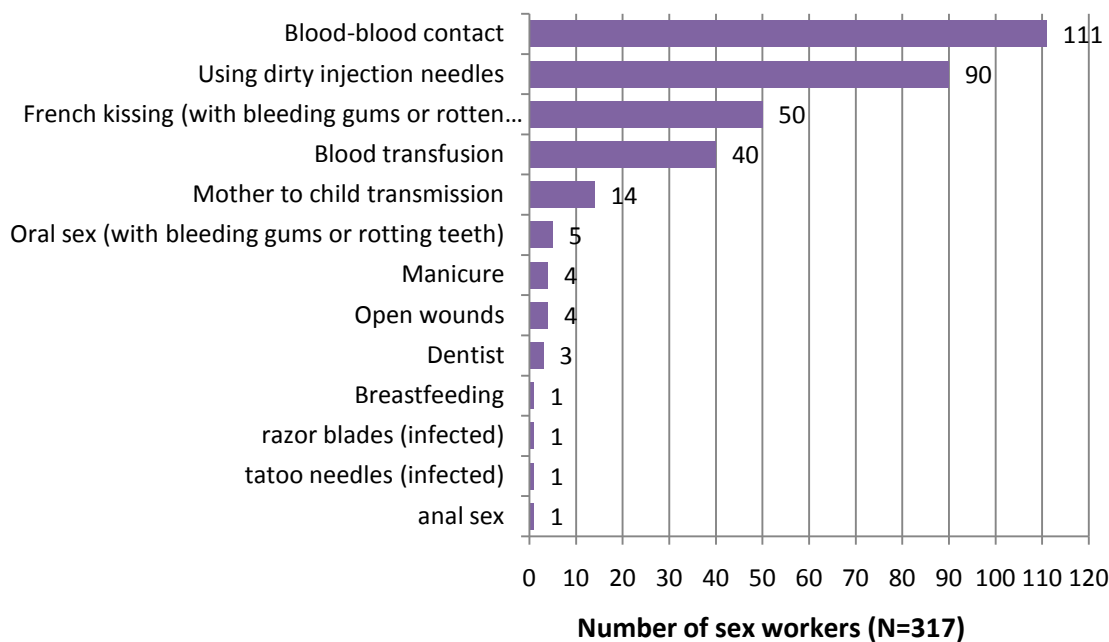
In order to further test knowledge of HIV/AIDS, a final open question was asked: “Can you name ways to be infected with HIV other than sexual transmission?” At least one additional form of HIV transmission was named by 79.5 percent of respondents (N<sub>total</sub>=317). The most well-known venues of HIV transmission apart from sex are blood-with-blood contact and sharing used injection (drugs)



needles. These transmission ways were mentioned by respectively 44.0 percent and 35.7 percent of respondents among those who named at least one other form of HIV transmission ( $N_{total}=252$ ; Figure 27).

“Tongue” or “French” kissing with an infected person, which was mentioned by 50 respondents (19.8%;  $N_{total}=252$ ) incorporates a small risk of HIV transmission because of possible blood contact. Blood transfusion, named by 40 survey respondents (15.9%;  $N_{total}=252$ ) continues to pose a risk, particularly in developing countries.

Figure 27. HIV transmission venues other than sex named by sex workers ( $N_{total}=317$ )



### 3.9 Seroprevalence

One hundred and ninety-one sex workers were tested for HIV. Of these 191 tested persons, 11 persons (5.8%) tested HIV+. At least two of the HIV+ tested persons already knew their status. Virtually all women who were asked if they wanted to participate in the seroprevalence study participated. Seroprevalence among female sex workers was 3.9 percent (7 persons;  $N_{total}=178$ )

Among men the refusal rate was much higher but we did not count how many refused. Among the men who refused to be tested, some said they knew that they were positive and others preferred not to know. Among the 13 men who did get tested, four (30.8%) were found HIV+. Because of the low number of male sex workers who participated in the seroprevalence study, we cannot generalize from this figure to the population of male sex workers at large. Given the results of earlier BSS studies among sex workers and among Men having Sex with Men, however, we ascertain that seroprevalence among male sex workers is relatively high; both as compared to that of their female colleagues and as compared to seroprevalence rates among the population of MSM at large (9.2 % found in a 2010 BSS among MSM).

Even though the number of HIV+ sex workers is too low to perform meaningful statistical analyses, several remarkable features are observed about this group. In the first place, all sex workers who were tested positive were Surinamers (6 individuals;  $N_{\text{total}}=49$ ) or Guyanese (5 individuals;  $N_{\text{total}}=44$ ). None of the Brazilian, Dominican or other nationality sex workers were tested HIV+. Secondly, all but two HIV+ sex workers in the sample were street workers. Of the remaining two, one worked in a massage salon and one worked in a club.

Only five out of the 11 sex workers who tested positive had also responded to the survey questions. Hence we cannot draw generalizing conclusions about this group versus the sample population at large. Nevertheless, the answers of the HIV+ individuals to the survey questions reveal several noteworthy details:

- Of these five HIV+ sex workers, one had “never” used condoms when having sex with clients in the month prior to the interview and one had done so “sometimes”.
- Four out of these five persons had a steady partner, and three “never” used condoms with their steady partner.
- Four out of the five HIV+ sex workers had experienced that the condom had broken or ripped in the month prior to the interview.
- Three of these five persons had indicated during the interview that they believed not to be at risk of HIV infection.

### 3.10 Sexual and reproductive health

In addition to HIV infection, there are several other issues that affect the sexual and reproductive health of sex workers. These issues include (unwanted) pregnancy and Sexually Transmitted Infections other than HIV.

Given the high rate of condom failure, one would expect female sex workers to use additional contraceptives to protect themselves against unwanted pregnancy. However, less than one third of female sex workers (29.0%) were using contraceptives other than the condom ( $N_{\text{total}}=255$ ). The most popular contraceptive method was oral contraceptive or the “pill”, which was used by two-thirds of women who were using additional contraceptives (66.2%;  $N_{\text{total}}=74$ ). The second most used contraceptive method was the contraceptive injection; used by 23.0 percent of contraceptive users ( $N_{\text{total}}=74$ ). Sterilization (8.1%) and contraceptive implants (2.7%) were less common among surveyed sex workers ( $N_{\text{total}}=74$ ).

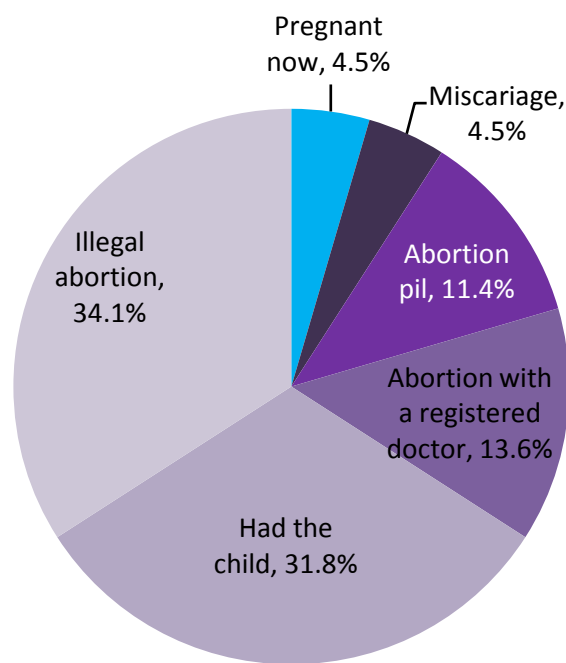
Considering that most female sex workers do not use any additional contraceptives, it may not be surprising that a considerable share among them get pregnant<sup>10</sup>. Among surveyed female sex workers, 17.7 percent had been pregnant in the year preceding the study, and two persons did not know for sure ( $N_{\text{total}}=248$ ). This figure includes two women who were pregnant at the time of the

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<sup>10</sup> We did not ask from whom the person was pregnant (e.g. steady partner, client).

research. Among those women who had been pregnant in the 12 months prior to this interview ( $N_{total}=44$ ), 31.8 percent had given birth to a child (Figure 28). More women, however, had aborted the baby; through a registered doctor (13.6%), an abortion pill (11.4%), or an unlicensed doctor (34.1%) ( $N_{total}=44$ ). Some women even reported multiple abortions and/or miscarriages in the past year. These findings suggest that safe sex is not consistently practiced.

Figure 28. Response to pregnancy among female sex workers who had been pregnant in the year preceding the study



82.7 Percent of respondents had done an HIV test in the year preceding the interview ( $N_{total}=313$ ). Among the 259 sex workers who had taken the test, two persons had not obtained the test result and one person did not know. Just under one third of sex workers (31.9%) had tested for STIs other than HIV in the year preceding the interview ( $N_{total}=313$ ). Among those who did get tested are the women from the one registered club of Suriname, who are obliged to take a bi-weekly medical check-up at the Department of Dermatology.

Twenty-two (7.2%) surveyed sex workers had experienced an STI in the year preceding the interview ( $N_{total}= 304$ ). The grand majority of sex workers (83.6%) claimed that they had never had an STI. Four individuals among those who had suffered from an STI did not know what kind of infection they had had. Those who did know what type of STI they had experienced named syphilis, gonorrhoea, vaginal discharge, lice scabies and candida. For 6.6% of respondents it was more than a year ago that they had been infected with 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. Overall, the majority of sex workers were uninsured. They would have to pay their medical expenses out of pocket when they fall ill (54.8%;  $N_{total}=314$ )(Table 12). The second most common way to pay for medical expenses was through a social welfare related health insurance plan such as, in Suriname, the “sociale zaken” card. This card is extended by the Ministry of Social Affairs to poor (*minvermogenden*) and very poor (*onvermogenden*) and provides access to social welfare services including a basic state health insurance package. Among Suriname sex workers 42.9 percent was insured through such a welfare-related state health plan ( $N_{total}=126$ ; Figure 29)

Table 12. Type of medical insurance used by surveyed sex workers ( $N_{total}=314$ )

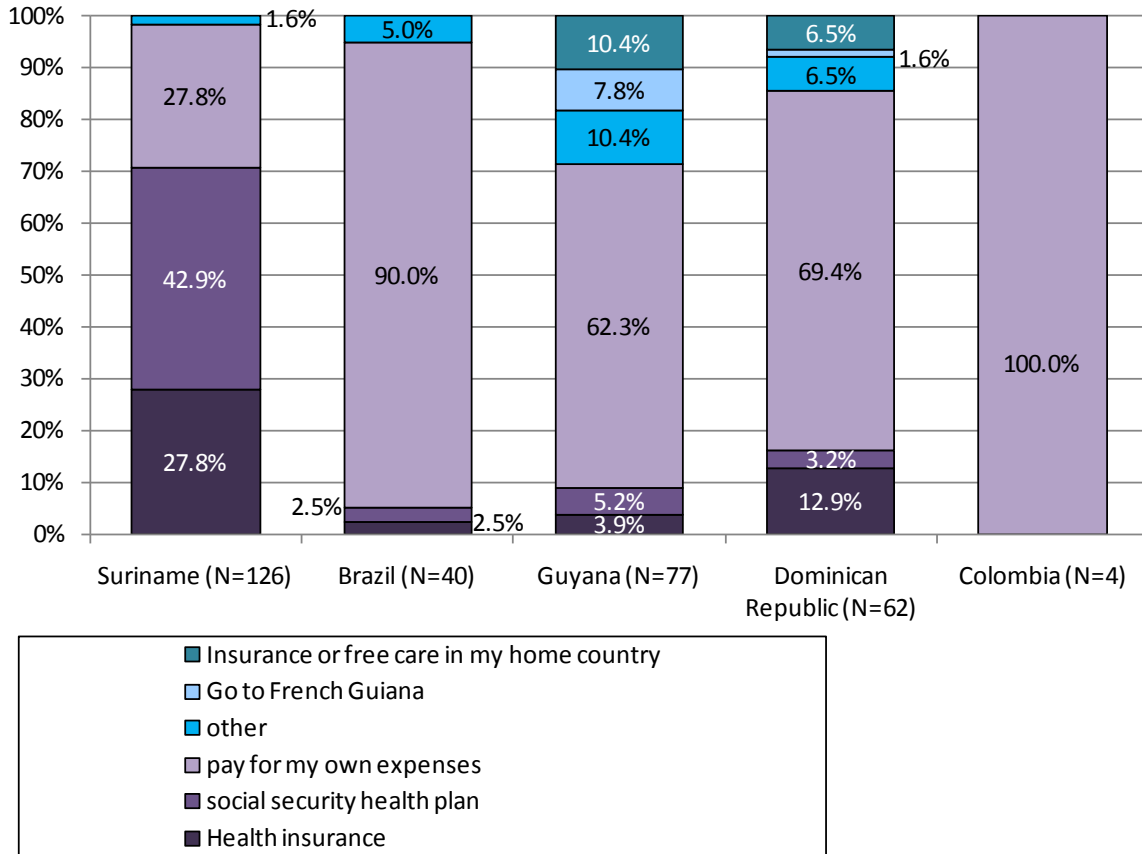
How are your medical expenses covered? ( $N_{total}=314$ )*		
Pay out of pocket for my medical expenses	172	54.8%
Social security health plan (e.g. “sociale zaken kaart”)	61	19.4%
Health insurance	47	15.0%
Insurance or free care in my home country	13	4.1%
Go to French Guiana where care is free	10	3.2%
Rely on parents/family	6	1.9%
Husband/partner	5	1.6%
Rely on friends	3	1.0%
Club owner will pay	1	0.3%
Regular client will help	1	0.3%
Don't know	1	0.3%

\* The total adds up to more than 100 percent because some people mentioned more than one option. For example, in their home country care is free but in Suriname they pay out of pocket.

A total of 15 percent of sex workers reported that they had some form of private or state health insurance. Suriname sex workers were much more likely than sex workers from other countries to be covered by a health insurance plan. One out of every ten (10.4%) Guyanese sex workers and 6.5 percent of Dominicans reported that they had health insurance or access to free care in their home country. However, they were uninsured for medical assistance in Suriname (Figure 29).

Guyanese sex workers formed the largest group among those who relied on others when they would need to pay for medical expenses. These “others” were often a partner, relative or friends (Table 12).

Figure 29. Percentages of sex workers from different countries and the way they pay for their pay for their health expenses\*



\* One Dutch and one Venezuelan sex worker were left out of this figure. Both were paying for their own medical expenses

Given the significant proportion of sex workers who have misconceptions about HIV and who involve in unsafe sexual behaviour, it is important that sex workers continuously receive information. Sex workers were asked where they had obtained information about HIV/AIDS in the year prior to the interview. The answers are displayed in Table 13.

Just over one quarter of sex workers reported that they had not received any information about HIV/AIDS at all in the previous year (26.2%; N<sub>total</sub>=317). Consistent with findings from the 2009 BSS, the Department of Dermatology remained the main source of information (23.7%; N<sub>total</sub>=317). The media, including magazines and internet, constituted the second most important source of information (14.2%; N<sub>total</sub>=317). The best-known non-governmental organizations (NGOs) that provide HIV/AIDS information were the Lobi Foundation (12.0%) and Foundation Rachab (10.7%), which previously operated under the name Maxi Linder Association (N<sub>total</sub>=317).

Table 13. Percentages of sex workers who have received HIV/AIDS information from different sources in the 12 months preceding the interview (Ntotal=317)\*

<i>In the past 12 months, obtained HIV information from:</i>		
	Frequency	Percentage
No information about HIV obtained	83	26.2%
Dermatological service	75	23.7%
Media/Magazines/Internet	45	14.2%
Lobi Foundation	38	12.0%
Foundation Rachab	34	10.7%
Home country	23	7.3%
RGD	18	5.7%
NAP	12	3.8%
Hospital/Clinic/VCT site/Natal care centre	11	3.5%
General practitioner	7	2.2%
club / other sex workers	7	2.2%
French Guiana	5	1.6%
Friends/Relatives	5	1.6%
Unspecified organization	5	1.6%
School	3	0.9%
New Beginnings CCS	3	0.9%
Unspecified persons	3	0.9%
Self investigated	2	0.6%
Suriname Men United	2	0.6%
Gold mining areas	1	0.3%
Every where	1	0.3%
Abroad	1	0.3%

\*Totals add up to more than 100 percent because some respondents had received information from more than one source

In addition to being the most important source of HIV information, the Department of Dermatology (Derma) remained the best known VCT site among sex workers (Table 14); mentioned by 53.0 percent of sex workers; N<sub>total</sub>=317). Derma largely thanks its fame to its role in performing biweekly health check-ups among sex workers from licensed clubs. The second best-known VCT site was Lobi Foundation (mentioned by 27.8% of sex workers; N<sub>total</sub>=317). Street workers were relatively more familiar with SMLA/ RACHAB as a test site (21.5%). Particularly Brazilian sex workers tended to go to Medilab, which they refer to as “Brahma”<sup>11</sup> (Figure 30).

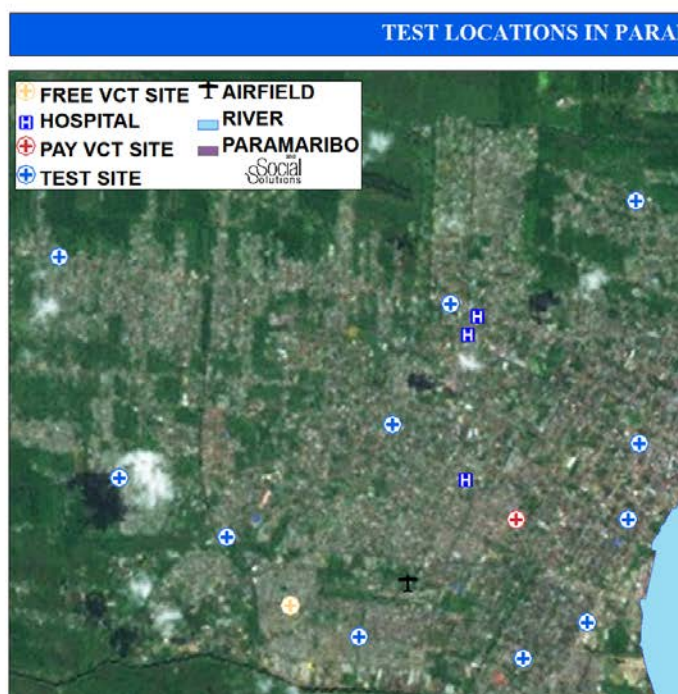
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<sup>11</sup> The Medilab medical lab is situated upstairs from a large Suriname pharmacy named Brahma

Table 14. Number and percentage of sex workers who identified a specific site as a place for HIV testing (Ntotal=317)

VCT site	frequency	percent
Department of Dermatology	168	53.0%
Lobi Foundation	88	27.8%
Foundation Rachab	68	21.5%
Medilab (Brahma)	32	10.1%
RGD	29	9.1%
Don't know where one can go	23	7.3%
General practitioner/clinic/hospital	22	6.9%
Medical lab (My lab, health control)	19	6.0%
Suriname Men United	1	0.3%
National AIDS Programme	1	0.3%

Figure 30. Free and paid VCT sites and other HIV test locations in Paramaribo



Finally, we tested sex workers' knowledge of the availability of support services for HIV-positive people in Suriname. Sex workers were asked where to bring an HIV-positive friend for social or medical support. The answers are displayed in Table 15. Also in this context the Department of Dermatology is the main place to seek for help (34.7%), followed by Lobi Foundation with 21.1 percent, RACHAB/SMLA (15.5 percent), and diverse health workers (general practitioners/clinic/hospital; 11.8 percent) ( $N_{total}=317$ ). More than one quarter of the respondents don't know where HIV+ persons might obtain support (25.9%;  $N_{total}=317$ ).

*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 ( $N_{total}=317$ )*

<i>HIV support</i>	<i>frequency</i>	<i>percentage</i>
Department of Dermatology	110	34.7%
Don't know	82	25.9%
Lobi Foundation	67	21.1%
Foundation Rachab	49	15.5%
General practitioner/clinic/hospital	30	9.5%
RGD	21	6.6%
NAP	17	5.4%
Medical lab	2	0.6%
Mamio Namen	2	0.6%
Libi	1	0.3%
Church	1	0.3%
Red Cross	1	0.3%
Suriname Men United	1	0.3%
Unspecified organization	1	0.3%



## 4. Discussion and conclusions

The objectives of this study were to

1. Identify, locate, and map clubs, bars, massage salons, CSW hustling zones, and other locations where CSW solicit or have sexual contact with clients.
2. Sketch a demographic and socioeconomic profile of female and male sex workers active in Paramaribo
3. Provide a better understanding of sexual practices, sexual risk behaviours, condom usage, knowledge on HIV/AIDS, and working conditions among different subgroups CSW by means of a Behavioural Surveillance Survey. The various subgroups will be identified on the basis of sex, nationality/ethnicity, working location (street, club, massage salon), and other possibly relevant factors.
4. Provide an informed estimate of HIV prevalence among different subgroups of CSW in Paramaribo.

In this section, we further interpret the results related to these study objectives. In 2009, a Behavioural Surveillance Survey was conducted among sex workers in Paramaribo, commissioned by the Suriname National Aids Programme. In this chapter we compare our findings with those from the 2009 survey. The demographic and socioeconomic profile of male and female sex workers operating in Paramaribo was discussed in section 3.1 and is not discussed in further detail here.

### 4.1 Identifying, mapping, and reaching sex workers

The present study does not reveal many new places where sex workers solicit their clients as compared to the locations that were identified in the 2009 BSS (Figure 3). One difference is that currently more massage salons and escort bureaus seem to be active or more visibly operating as places where sex is being sold. This time, we found massage salons more willing to collaborate and as a result the present (2012) study includes more sex workers from massage salons. The various escort bureaus that were approached, however, refused participation. Furthermore, like in the 2009 BSS, we have not been able to motivate Chinese owned salons and clubs to participate in the study.

The results suggest that the majority of sex workers are not reached by HIV/AIDS outreach services. Two Suriname organizations are specifically targeting sex workers in HIV/AIDS outreach work: New Beginnings Consulting and Counseling Services (NBCCS) and Foundation Rachab – formerly called Stichting Maxi Linder Association (SMLA) (Table 16). Among street workers, Foundation Rachab is a relatively well-known organization for the distribution of condoms and the provision of HIV/AIDS-information and VCT services. Nevertheless, less than a third of street workers reported that they had received condoms or information from this organization in the year prior to the study. Only three street workers reported that they had received condoms from NBCCS and none recalled that they had obtained HIV/AIDS-information from this organization.

Table 16. Organizations, services and programmes that provide sexual reproductive health services and/or specific HIV services in Suriname.

Organization, Service or Programme	Type of organisation	Target group	VCT Service	Free Condoms	Information on HIV/AIDS
<b>Government related</b>					
National Aids Programme	Public	Organisation who work on HIV/AIDS	No	No	Yes
Regional Health Service (RGD)	Public	The coastal population	Yes (only 6)	Yes	Yes
Department of Dermatology	Public	Public in general	Yes	Yes	Yes
Libi	Public	Public in general	No	Yes	Yes
Global Fund Malaria Programme	Public	Small-scale gold miners who work in the interior of Suriname	No	Yes	No
<b>Private, non profit organisations and NGO's</b>					
Medical Mission (MZ)	Non profit	Population of the interior	Yes	Yes	Yes
Foundation Rachab	NGO	Sex workers	Yes	Yes	Yes
Lobi Foundation	NGO	Society in general; special programs for youth and other groups	Yes	Only female condoms free	Yes
Double positive	NGO	Women and young girls living with HIV/AIDS	No	Yes	Yes
Foundation Liefdevolle handen	Faith-based	Women in general, sex workers, drugs addicts	No	Yes	Yes
New Beginnings Consulting and Counseling Services	Consulting	Sex workers	No	Yes	Yes
Claudia A	Care and welfare organisation	Persons living with HIV/Aids	No	Yes	Yes

Neither Foundation Rachab nor NBCCS was mentioned by sex workers in clubs and massage salons as a source of free condoms and HIV/AIDS information. Foundation Rachab was named by just three women working in massage salons as a possible VCT site (Rachab). It must be noted that several sex workers had received information or services from an organization or persons they could identify, and hence the real figures may be somewhat higher. Furthermore, because NBCCS performs outreach services for other organizations (e.g. NAP and Lobi), they may not be identified under their own name. Nevertheless, the data suggest that the majority of sex workers are not reached by these organizations. It is also apparent that a significant share of sex workers has not received free condoms or information, and does not know where to go for an HIV test.

Clubs with sex workers can register with the alien registration department and the Department of Dermatology. Based on their registration the girls working in these clubs obtain legal (temporary) residency and are obliged to undergo a biweekly health check-up (mainly for STIs) at the dermatological service. Of all places we visited, only one club was registered and one club by the same owner recently reopened and was in the process of registration. Registration is beneficial to the women working in the clubs, who receive free medical check-ups and can ask questions to the multilingual health worker at the Department of Dermatology. Registration also benefits the clients and their possible partners, who are relatively more protected against the transmission of STIs.

Even though many sex workers are not reached by outreach programmes for sex workers, we do observe an increase in the number of respondents who obtained condoms from one of free distribution sources. The 2009 BSS indicated that sex workers hardly actively made use of the free condoms that were available from various public locations. They mostly bought condoms at the (Chinese) supermarket or else relied on the condoms that were distributed by Foundation Rachab (then still Foundation Maxi Linder) in the streets or those supplied in the club and hotel rooms. In 2012 this has changed; 80.1 percent of surveyed sex workers reported the receipt of free condoms ( $N_{\text{total}}=317$ ). In 2009 we did not specifically ask about the receipt of free condoms though, and hence we cannot state how much the share of sex workers who have received free condoms has increased. 71.5 Percent of those who had received free condoms were of the opinion that the free condoms were perfectly fine.

In conclusion, even though the places from where sex workers solicit clients have remained relatively constant in the past three years, only a minority of sex workers is reached by either the NGOs working with sex workers or the public programme for sex workers. Legalization of sex work and obliging legal sex clubs and sex workers to register may benefit public health. It also would allow the government to better control the health and working conditions of sex workers and to sanction sex clubs and workers who do not comply with –to be developed– public regulations for sex work. Furthermore, registration would provide insight and might improve health and working conditions in clubs, massage salons, and escort bureaus that are now operating underground and refuse to participate in HIV/AIDS prevention studies and outreach activities.

## 4.2 Sexual behaviour, condom use, and knowledge and perceptions of HIV/AIDS

The study suggests that various factors interfere with safe sexual behaviour and condom use. These factors are listed below.

(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 possibly impairs decision-making about consistent condom use.

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

The listed factors do not to the same extent apply to all subgroups of sex workers. Table 17 provides more information about subgroup variation with regard to consistent condom use. The data suggest that the main subgroup divisions that 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 these factors are 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.

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.

In addition to the factors that were investigated through the BSS, additional factors that possibly interfere with consistent condom use were identified in informal conversations with sex workers and their clients, and in spontaneous comments during the BSS interviews. In the first place, some sex workers sell sex without a condom for extra pay. Because the BSS did not ask about the role of money in decisions about condom use, we cannot say how common this behaviour is. Secondly, some women commented that allergic reactions to latex motivated them to not use a condom, for example during oral sex. The role of money and latex allergy in condom use warrants further investigation.

Table 17. 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) when 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.

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 programmes, VCT sites and employers; much more than two years ago (Heemskerk and Uiterloo 2009). For those who buy condoms, cheapness is not among the selection criteria; instead condoms are purchased based on their strength and quality. Sex workers who said that the price was an issue typically commented that they bought the most expensive ones.

Like the consistency of condom use, also the correct way of condom use is mediated by gender, nationality, and age. The main behaviours 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 reduce 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 from where the sex workers come.

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.

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. Of particular interest is that the percentage of sex workers who report condom use during their most recent anal sexual contact with a client has increased dramatically from 87.0 percent in 2009 to 98.9 percent in 2012. 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 89.9 percent in 2012. Because of these

contradictions we cannot indicate whether sex workers more or less frequently use condoms today as compared to three years ago.

With regard to HIV/AIDS knowledge and perceptions, we detect the following trends.

Virtually all respondents in both the 2009 and 2012 study identified condom use as the best way to prevent the sexual transmission of HIV/AIDS. However, because this question was asked as an open question this year, instead of the agree-disagree question from the 2009 survey, we cannot compare the outcomes of this knowledge test.

Consistent with the 2009 study, we find that knowledge about HIV transmission is reasonable. However, various misconceptions persist. For example, 14.5 percent of respondents believed that HIV may be transmitted through a mosquito bite, and 7.9 were not sure about whether this is possible. Like the 2004 study among street-based sex workers (CAREC/PAHO and SMLA 2004) and the 2009 BSS, the present BSS demonstrates that many sex workers have a distorted perception of their own risk of becoming infected. Even though the majority of sex workers have experienced condom breaks, they know that an HIV+ person cannot be recognized and understand that HIV can be transferred through unprotected vaginal, oral and anal sex. Many, however, do not consider these factors when judging personal infection risks. 57.2 Percent of surveyed sex workers were of the opinion that they are not at risk of contracting HIV. Three sex workers in this group were found to be HIV+!

Table 18. BSS and seroprevalence study Indicators

Indicator	2009	2012	
	%	% (N*)	N <sub>total</sub> **
Seroprevalence among sex workers (% HIV+)	7.0%	5.8% (11)	191
Seroprevalence among female sex workers (% HIV+)	3.8%	3.9% (7)	178
Seroprevalence among male sex workers (% HIV+)	69.3%	30.8% <sup>12</sup> (4)	13
Percentage of sex workers who reported condom use the last time they had had vaginal sex with a client (only those having vaginal sex)	98.4%	99.3% (268)	270
Percentage of sex workers who reported condom use the last time they had had anal sex (only those having anal sex)	87%	98.9% (92)	93
Percentage of sex workers who reported condom use the last time they had had oral sex (only those having oral sex)	94%	96% (192)	200
Percentage of sex workers who report that they <u>always</u> used condoms with their clients in the month prior to the interview	96%	89.9% (284)	316
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%	26.7% (39)	146
Percentage of sex workers who correctly identify 'using a condom' as the most effective way to prevent the sexual transmission of HIV		96.5% (304)	315
Percentage of sex workers who both correctly identify using a condom as the best way of preventing the sexual transmission of HIV <i>and</i> who reject three major misconceptions about HIV transmission.	209	66.5%	316
Percentage of sex workers who received free condoms in the year prior to the interview	<70%	80.1%	317
Percentage of sex workers who received HIV/AIDS information in the year prior to the interview		73.8% (234)	317
Percentage of sex workers who <b>do not</b> believe that they are at risk of becoming infected with HIV	33.2%	57.2% (180)	315

\* Numerator; \*\* Denominator

<sup>12</sup> Because of the low number of male sex workers who were tested, we cannot generalize from this figure to the population of male sex workers at large.



In conclusion, we may state that sex workers are very conscious about consistent condom use. In practice, however, there are various factors that reduce the likelihood of consistent condom use, including sex with a steady partner, having oral sex, and alcohol and/or drugs use.

The study demonstrates that it is important to not perceive and treat all sex workers as one homogeneous group. The study found differences between sex workers belonging to different sub groups based on age, gender, and nationality. These differences were found 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. They reported a wide variety of emergency strategies aimed at reducing the chances of pregnancy and HIV infection after condom rupture. 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 counselling, and support for HIV+ people. Providing such information and assistant 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. Knowledge of STIs other than HIV is low, and few sex workers ever get tested on STIs. Education, information, and awareness should focus on STIs in addition to HIV.
3. Education about the importance of consistent and correct condom use should not only target sex workers, but also their clients too. 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. TV may offer an appropriate medium to reach the general public, including clients of sex workers.
4. Informational yet attractive posters and leaflets about HIV transmission and the location of various HIV services should be distributed in locations where sex workers are active. These materials should be available in different languages, notably English, Spanish, Portuguese, Dutch, and Sranantongo.
5. Sex clubs and massage salons should provide education about correct condom use to new sex workers. They also should provide free condoms for the women working in the clubs/salons.
6. Attractive and explicit education and awareness materials must be developed to inform sex workers. Subjects to cover may include; consistent and correct condom use, what to do after condom failure, and where to go for HIV/AIDS information, HIV testing and counselling, and support for HIV+ people. A 10-15 minute infomercial that targets and includes sex workers, in their own language, may be an effective communication tool. An instructional video could be obligatory for new sex workers in clubs and salons. In addition, it may be worthwhile to develop an informative leaflet in the various languages (Spanish, Portuguese, English, and Dutch)
7. Only a small percentage of Surinamese sex workers had received information about proper condom use from TV or the internet. These mass media as well as social media (e.g. facebook, twitter) provide a great opportunity to reach a wide range of sex workers and their clients. Typically HIV/AIDS awareness advertisements stress the *use* of condoms, but do not provide information on *how* to use a condom correctly.

8. 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.
9. Education and awareness programmes to promote consistent and correct condom use should consider cultural differences within sex worker' sub groups. When working with a particular subgroup, for example Dominican club workers, the provided information should pay extra attention to misconceptions that exist in this population sub group.
10. At present only one sex club is registered and takes part in the STI prevention programme of the dermatological service. All sex clubs and massage salons should be obliged to register and take part in this programme in order to better reach sex workers with information and reduce sex related health risks.
11. Just like any industry, the sex industry should commit to basic health, safety, and human rights standards for its workers. The Suriname government division for labour inspection should controls sex clubs for adherence to –to be defined- workers' rights and conditions, including the free availability of condoms. Coercive measures to keep sex workers from leaving the clubs, such as the confiscation of passports, should be researched, discouraged and punished.
12. Many sex workers expressed an interest in HIV testing but were either hesitant to visit a VCT site or did not know where to go. The Ministry of Health/National AIDS Programme should provide regular (e.g. bi-annual) free and anonymous HIV testing and counselling services in all sex work locations, including clubs, bars, massage salons, and streets.
13. The Libi and Lobi mobile clinics are great facilities for the provision of HIV services to mobile populations including sex workers. At present, however, these mobile clinics are only rarely used for HIV testing and counselling in the streets of Paramaribo – or outside of Paramaribo. This seems like a missed opportunity. Bi-annual outreach to the various neighbourhoods where street workers solicit clients could improve the access to HIV services of this vulnerable group.
14. HIV services to sex workers must be delivered by health workers who speak the languages spoken in by the sex workers, including Portuguese, Spanish, English, and Sranantongo.
15. Seroprevalence is alarming among male sex workers. Even though the number of tested males was low, this and previous BSS studies suggest that many male sex workers are HIV+. Outreach activities should make a particular effort to reach this group and their clients.

16. 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 behaviour of clients and their reasons to request unsafe sex.
17. Activities to improve 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.
18. We have found that particularly migrant sex workers are often uninsured. The Suriname government should secure for the future the universal access to HIV services by official texts clearly stating that HIV services should be accessible to migrants regardless of their legal status
19. Work with foreign NGOs that represent the interests of sex workers such as the Guyanese sex workers association and the *Centro de Orientacion Integral* (Centre for Integrated Training and Research-COIN) in the Dominican Republic, in order to support foreign sex workers in Suriname.
20. Use best practice experiences from countries with similar issues, such as Guyana, French Guiana, and Brazil. The Brazilian Ministry of Health or Brazilian HIV organizations that work in the north of Brazil may have useful experiences to share.
21. Governmental and non governmental institutions that develop policy interventions focused on health provision for sex workers need to invite the input of representatives of this target group. These representatives will advocate for the access of both Suriname and migrant sex workers to Health services in general and HIV&AIDS services in particular.

## References

CAREC/PAHO and Maxi Linder Foundation (2005). HIV/AIDS and Commercial Sex Work in Suriname. An HIV sero-prevalence and behavioural study among commercial sex workers (sex workers) in Suriname. NAP, Paramaribo, Suriname

Heemskerk, M. and M. Uiterloo (2009). Commercial Sex Work in Paramaribo, Suriname. A Behavioural 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 Programme. Suriname (SUR-506-G03-H). Paramaribo, Suriname.

Markosyan KM, Babikian T, DiClemente RJ et al. (2007). Correlates of HIV risk and preventive behaviours 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). Behavioural 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.

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 Survey form (English)

Date: \_\_\_\_\_

Location: \_\_\_\_\_

Personal code:

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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: \_\_\_\_\_

How old are you now? \_\_\_\_\_ Years

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

a. \_\_\_\_\_

c. \_\_\_\_\_

e. \_\_\_\_\_

b. \_\_\_\_\_

d. \_\_\_\_\_

f. \_\_\_\_\_

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

1. Suriname

4. Dominican

7. Other: .....

2. Brazilian

5. French

8. Other Latin: .....

3. Guyanese

6. Chinese

With which population group do you identify / belong?

1. Creole

3. Hindustani

5. Javanese

7. Maroon

2. Indigenous

4. Mix

6. Chinese

8. Other: .....

What is the highest level of formal education you completed?

1. None

7. Completed High school

2. .... Class of Primary school (GLO)

8. University

3. Completed Primary school

9. Special education

4. ....Class of Secondary school (VOJ)

10. Technical/vocational

5. Completed Secondary school

11. Other: \_\_\_\_\_

6. ....Class of High school (VOS)

How old were you the first time someone paid to have sex with you? \_\_\_\_\_ Years

Did you use a condom? 1. Yes

2. No

Where do you usually find / meet your clients?

1. On the street

3. In a house

5. In a club

7. In a cabaret (gold fields)

2. In a bar

4. In a hotel

6. By phone appointment

8. Other: \_\_\_\_\_

Where do you usually have sex with your clients?

- 1. Somewhere outdoors
- 2. In a bar
- 3. At my own home
- 4. In a (short-stay) hotel
- 5. In the club where I work
- 6. cabaret
- 7. other: \_\_\_\_\_

Do you only work as a CSW in Suriname or in other countries as well?

- 1. Only Suriname
- 2. French Guiana
- 3. Guyana
- 4. Brazil
- 5. Other \_\_\_\_\_

What clients do you usually have?

- 1. Men
- 2. Women
- 3. Men and women
- 4. Other: \_\_\_\_\_

Do you perform the following sexual services? (check all that apply)

- 1. Vaginal sex
- 2. Oral sex
- 3. Anal sex

The last time you had vaginal sex with a client, did you and your client use a condom?

- 1. Yes
- 2. No
- 3. no vaginal sex
- 4. No answer

The last time you had anal sex with a client, did you and your client use a condom?

- 1. Yes
- 2. No, only regular condom
- 3. No condom
- 4. No anal sex
- 5. No answer

The last time you had oral sex with a client, did you or your client use a condom or dental dam? (beflapje)?

- 1. Yes
- 2. No
- 3. No oral sex
- 4. No answer

In the past month did you consistently use condoms with your clients ?

- 1. Always
- 2. Sometimes
- 3. Don't know
- 4. Almost every time
- 5. Never
- 6. No answer

Did you ever receive information on how to properly use a condom?

- 1. No
- 2. Yes at school
- 3. Yes from family or friends
- 4. Yes from an organization
- 5. Other \_\_\_\_\_

Where do you usually get your condoms? (multiple answers possible)

- 1. Pharmacy/drug store
- 2. Supermarket
- 3. Derma
- 4. RGD clinic
- 5. Stg. Lobi
- 6. RACHAB (SMLA)
- 7. NAP
- 8. Other, \_\_\_\_\_
- 9. Brought from abroad

What criteria do you use when buying and/or obtaining condoms?

- 1. Price
- 2. Strength
- 3. Brand
- 4. Custom/habit
- 5. Material
- 6. Other \_\_\_\_\_

Are you currently using any drugs?

- 1. Marijuana/Hashish
- 3. Never used drugs
- 5. Amphetamines

2. Cocaine (crack, coke)                      4. Not using drugs now                      6. Other, \_\_\_\_\_

Have you injected drugs in the past 6 months? 1. Yes    2. No                      3. no answer

If so, did you use clean needles to inject the drugs?

1. Yes                      2. No                      3. no answer

In the past 12 months, have you exchanged sex for drugs?

1. Yes                      2. No                      3. No answer

At moments that you are at work do you consume alcohol? How much?

1. Nothing at all                      2. 1-2 glasses                      3. 3-6 glasses                      4. >6 glasses

Do you have a steady partner? If yes, for how long have you been together?

1. No steady partner                      3. Yes, 6-12 months                      5. Yes, 2-5 years  
2. yes, 1-6 months                      4. Yes, over a year                      6. Yes, longer than 5 year

Do you have more than one non-paying partners? If yes, how many?

1. No                      2. Yes, (*write number*) \_\_\_\_\_                      3. No answer

In past month did you consistently use condoms with your steady partner(s)?

1. Always                      2. Almost every time                      3. Sometimes  
4. Never                      5. Don't know                      5. No answer

In the past months have you experienced problems with condom use?

1. Slid off                      5. Rip/Burst  
2. Damaged when opened/put on                      6. Secretly removed by partner  
3. Got stuck                      7. Other; \_\_\_\_\_  
4. No problems                      8. Not applicable

What do you do when a condom breaks or slips off? (multiple answers possible)

1. Rinse/wash                      7. Just continue  
2. Take antibiotics (e.g. 'red-and-black')                      8. Take morning after pill (pregnancy)  
3. Take morning after pill (against HIV)                      9. Immediately stop having sex  
4. Replace the condom                      10. No action, hope or pray for the best  
5. Seek medical advice/help asap                      11. Take HIV test asap  
6. Take HIV test after three months                      12. Other \_\_\_\_\_

Do you or your sexual partner (paying or non-paying) ever wear two condoms on top of one another for additional protection?

1. Always                      3. Don't know                      5. Never  
2. Sometimes                      4. Almost every time                      6. No answer



Do you use water-based lubricant to decrease the risk of condom rupture?

- 1. Always
- 2. Sometimes
- 3. Don't know
- 4. Almost every time
- 5. Never
- 6. No answer

(for women only): Do you wash your vagina with herbs to remain dry and tight?

- 1. No, never
- 2. Yes, daily
- 3. Yes, weekly
- 4. Once in a while

Do you think you are at risk for HIV infection?

- 1. Yes, because: \_\_\_\_\_
- 2. No, because I always use condoms with clients
- 3. No, because I select my clients carefully
- 4. No, because: \_\_\_\_\_
- 5. Don't know

In the past 12 months, have you received information about HIV and AIDS? If yes, from who?

- 1. RGD clinic
- 2. Derma
- 3. Stg. Lobi
- 4. NAP
- 5. General Practitioner
- 6. SMLA
- 7. Media
- 8. Other \_\_\_\_\_
- 9. No information
- 10. French Guiana
- 11. Home country

In the last 12 months, have you received free condoms from an outreach programme, activity, employer or clinic? If yes, from which one?

- 1. RGD clinic
- 2. NAP
- 3. Derma
- 4. RACHAD (before Maxi Linder)
- 5. Stg. Lobi
- 6. Employer (club owner, pimp)
- 7. No condoms received
- 8. Other: \_\_\_\_\_

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

- 1. Perfectly fine
- 2. Too dry
- 3. Too tight
- 4. Too thin
- 5. Too thick
- 6. Unpleasant smell
- 7. other, \_\_\_\_\_

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**?

1. RGD clinic                      2. Stg. Lobi                      3. NAP                      4. General Practitioner  
 5. Stg. Rachad   6. Derma                      7. Other, \_\_\_\_\_  
 8. Don't know where one can go in Suriname for support to HIV+ people

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

Answer: \_\_\_\_\_

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
One can get HIV from a mosquito bite			
You run a risk of being infected with HIV if you share a meal with someone who is infected			
You run a risk of being infected with HIV if you use the toilet after a person who is HIV+			
A healthy-looking person can have HIV			

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

1. No                      2. Yes , \_\_\_\_\_

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

1. RGD clinic                      4. Stg. Rachad (Maxi linder)                      7. Other: \_\_\_\_\_  
 2. Derma                      5. General Practitioner                      8. hospital  
 3. Stg. Lobi                      6. Don't know where to go

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

1. In the past 12 months                      2. Never                      3. More than a year ago                      4. Don't know

In the past year, have you tested for HIV?

1. Yes                      2. No                      3. Don't know                      4. No answer

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

1. Yes                      2. No                      3. Don't know                      4. No answer

In the past year, have you tested for STIs other than HIV?

1. Yes
2. No
3. Don't know
4. No answer

If you had an STI in the past year, what kind of STI was it?

1. Don't know
2. \_\_\_\_\_

What did you do to treat this STI?

1. No treatment, it went away by itself
2. I received treatment from Stichting Lobi
3. I received treatment from derma
4. I received treatment from my General Practitioner
5. I bought medicine at the pharmacy
6. I used a home remedy
7. Other, \_\_\_\_\_

In the last 12 months, have you been threatened with violence or have you been assaulted?

1. No
2. Yes, threatened
3. Yes, assaulted
4. Yes, threatened and assaulted
5. No answer

Do you use any contraceptives other than the condom to protect yourself against unwanted pregnancy?

If yes, which one?

1. No other contraceptives
2. Yes, \_\_\_\_\_
3. I don't know
4. No answer

Have you been pregnant in the past 12 months? If yes, what did you do?

1. No pregnancy
2. Yes, I had an abortion by a non-registered/illegal doctor
3. Yes, I took the morning after pill / abortion pill
4. Yes, I had an abortion by a legal/registered doctor
5. Yes, I had the child
6. I don't know
7. No answer

If you were to fall ill, how will your medical expenses be covered?

1. I have health insurance
2. I have a social security (*sociale zaken*)
3. I have to pay for my own medical expenses
4. other: \_\_\_\_\_
5. I go to French Guiana where care is free
6. I have insurance in my home country

THANK YOU FOR YOUR PARTICIPATION IN THIS SURVEY