



# **INTEGRATED BIOLOGICAL AND BEHAVIOURAL SURVEILLANCE (IBBS) SURVEY AMONG KEY POPULATIONS AT HIGHER RISK OF HIV IN SRI LANKA**

**REPORT**  
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March 2015



**The Global Fund**  
To Fight AIDS, Tuberculosis and Malaria



**Management Frontiers**  
*Liberating Potentiality*



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- Saviya Development Foundation, Galle
- Human and Resource Development Foundation, Galle
- Samadhi Foundation, Galle

## Preface

It is with great satisfaction that we present the Final Report of the Integrated Biological and Behavioural Surveillance (IBBS) Survey among Most At Risk Populations for HIV (MARPs). This is the first representative survey of its kind conducted in Sri Lanka. This survey estimated the prevalence of HIV and syphilis and associated risk behaviours among Female Sex Workers, Men who have Sex with Men, Intra Venous Drug Users and Beach Boys. This survey captured several aspects of high risk behaviours including unprotected sex, type of sexual partners, drug and alcohol use, and assessed the use of and access to health and social welfare programs among MARPs to identify means for increasing their coverage and uptake. A country like Sri Lanka where the HIV epidemic is of very low magnitude, there is a need for additional information about key populations at higher risk for HIV.

Participation of IBBS survey was voluntary, anonymous and consisted of a face to face behavioural questionnaire linked to data from HIV and Syphilis testing. In this survey two novel approaches, namely electronic data entry using Open Data Kit (ODK) and HIV and Syphilis rapid testing in the field setting were used. This IBBS provided a safe environment for MARPs-friendly HIV counselling and testing and is an example of the types of services that can be achieved nationally for key populations at higher risk for HIV.

The data from the IBBS survey confirm that Sri Lanka continue to have a very low level HIV epidemic. Our challenge is to maintain this level without escalation. Based on scientific evidence generated in this survey, it is our hope that the Ministry of Health and the National HIV and AIDS Committee, together with partners involved in HIV programming, will strive to implement strategic and comprehensive HIV prevention and care programs that will address the unique characteristics and vulnerabilities identified among MARPs in Sri Lanka. This IBBS survey serves as a baseline for future IBBS rounds of the same design as part of a national biological and behavioural surveillance system that tracks changes in the HIV epidemic and the national response to the epidemic. Future rounds of IBBS will monitor the progress achieved by targeted interventions for the prevention of HIV infection and provision of care and treatment among MARPs. In order to effectively respond to HIV, it is necessary to 'know your epidemic' by gathering important epidemiological data. With this in mind, the National STD/AIDS Control Programme welcomes this important epidemiologic contribution and will continue to facilitate a collaborative environment where such important findings can be actionable at the highest level of the national response with the ultimate goal of an AIDS free generation.

We thank those who agreed to participate in this survey. The success of the survey was possible due to the commitment and professionalism of the team of survey investigators, community outreach workers, site supervisors, HIV counsellors, nurses, interviewers, coupon managers, receptionists, and laboratory technicians. Our thanks are extended to various institutions, including Management Frontiers (Pvt) Ltd. of Sri Lanka, Royal Tropical Institute of Netherlands, Technical experts from Faculty of Medicine, University of Sri Jayewardenepura, Medical and Reference Laboratory Staff of the National STD/AIDS Control Programme, the Provincial Directorates of Health in Southern, Western, Central Province and North Central Province, and chairman and the members of the IBBS Survey Technical Steering Committee.

Last but not least this survey wouldn't have been possible without the financial assistance from the Global Fund to fight against HIV/TB and Malaria.

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## Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ART	Antiretroviral Therapy
BB	Beach Boy
BSS	Behavioural Surveillance Survey
CSO	Community Service Organization
DU	Drug User
FPASL	Family Planning Association of Sri Lanka
FTL	Field Team Leader
FSW	Female Sex Worker
GARPR	Global AIDS Response Progress Reporting
HIV	Human Immunodeficiency Virus
HTC	HIV Testing and Counselling
HSS	HIV Sentinel Sero Surveillance Survey
IBBS	Integrated Biological and Behavioural Surveillance
IDU	Injecting Drug User
IES	Information, Education and Communication
KII	Key Informant Interview
KIT	Royal Tropical Institute
MARP	Most-at-Risk Population
MDG	Millennium Development Goal
M&E	Monitoring and Evaluation
MF	Management Frontiers
MoH	Ministry of Health
MSM	Men who have Sex with Men
NSACP	National STD/AIDS Control Programme
NGO	Non-Governmental Organization
ODK	Open Data Kit
OR	Odds Ratio
PITC	Provider Initiated Testing and Counselling
PKI	Primary Key Informants
PLHIV	People Living with HIV/AIDS
PWID	Person who Injects Drugs
PSE	Population Size Estimation
RDS	Respondent Driven Sampling
RDS-A	Respondent Driven Sampling Analyst
RDSAT	Respondent Driven Sampling Analysis Tool
SBCC	Social and Behaviour Change Communication
SSC	Survey Steering Committee
STI	Sexually Transmitted Infection
SW	Sex Workers
UCSF	University of California San Francisco
UNAIDS	The Joint United Nations Programme on HIV and AIDS
UNDP	United Nations Development Programme
UNGASS	United Nations General Assembly Special Session on HIV and AIDS
VCT	Voluntary Counselling and Testing
WHO	World Health Organization

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## Glossary

Beach Boys (BB)	The definition used in this survey for BB is as follows: Males who cruise in and around beach areas, and associate with tourists as guides, animators or providers of any form of gratification including insertive and receptive sex (homosexual, heterosexual or bisexual orientation), during the previous 12 months.
Convergence	Point at which the RDS sample proportions for each variable no longer change (or change very minimally) regardless of how many more individuals are recruited. Original term used in RDSAT is equilibrium, while convergence is the term used in RDSA.
Equilibrium	Point at which the RDS sample proportions for each variable no longer change (or change very minimally) regardless of how many more individuals are recruited. Original term used in RDSAT is equilibrium, while convergence is the term used in RDSA.
Female sex worker (FSW)	The definition used in this survey for FSW is as follows: Any female, who has sold sex in exchange of money or goods in the past six months.
Homophily	The tendency for respondents to recruit people who have the same traits as themselves. A homophily value of one means no homophily, while values above one show the presence of positive homophily (people are recruiting similar to themselves), and values below 1 mean negative homophily (people are recruiting different from themselves)
Lifetime prevalence	The proportion of a population found to have a condition or a disease over the course of a lifetime, in comparison with point prevalence, which is the proportion of a population that has the condition at a specific point in time. In the context of this report, lifetime prevalence is referring to syphilis infection, which can be taken to mean 'ever had syphilis', in comparison with 'active syphilis' which is defined as those who tested positive for syphilis at the time of the survey specifically.
Men who have sex with men (MSM)	The definition used in this survey for MSM is as follows: Men who have had sex with another men in the past six months as a matter of preference or practice, regardless of their sexual identity or sexual orientation, and irrespective of whether they also have sex with women or not.
People who inject drugs (PWID)	The definition used in this survey for PWID is as follows: A person who has been injecting drugs during the 12 months preceding the study.
Population estimation	The estimate produced by RDS for the variable of interest in the entire population (as opposed to the sample proportion).

## Glossary *Cont.*

Respondent Driven Sampling (RDS)	Methodology used to recruit key populations at higher risk of HIV worldwide. Similar principle as snowball sampling (chain referral), with addition of a mathematical model to weight the sample, to compensate for seed selection.
Respondent Driven Sampling Analysis Tool (RDSAT)	Original software developed to undertake analysis of RDS data, developed by Douglas Heckathorn in 1997, as part of a National Institute on Drug Abuse-funded HIV-prevention research project targeting drug injectors in several Connecticut cities. The newest version of the software is Version 7.0 and can be found at <a href="http://www.respondentdrivensampling.org">www.respondentdrivensampling.org</a>
Respondent Driven Sampling Analyst (RDSA)	Newly developed software to undertake analysis of RDS data, written for the R statistical environment. The interface of RDS Analyst is similar to SPSS. Further information and installation file can be found at <a href="http://hpmrg.org/software/RDSAnalystSetup.0.50.exe">http://hpmrg.org/software/RDSAnalystSetup.0.50.exe</a> .
Sample proportion	The results from the dataset, from the sample, as opposed to the population estimates which are generated by an RDS estimator (e.g. such as RDSAT or RDS-A).
Seeds	In RDS, recruitment begins with a set number of 'seeds' who are purposively selected. Selected seeds should be heterogeneous in terms of various characteristics. For example, the FSW group had multiple seeds from the various subsets of FSW, e.g. massage parlour based, street based, etc.

# Executive Summary

## Background

The HIV prevalence in Sri Lanka is less than 0.1% according to the National STD and AIDS Control programme (NSACP, 2013); however, minimal data is available amongst key affected populations (MARP), including female sex workers (FSW), men who have sex with men (MSM), people who inject drugs (PWID) and beach boys (BB). Data amongst MARP is required to evaluate and guide national HIV responses, and this data is most commonly obtained through integrated biological and behavioural surveillance (IBBS) Survey. In Sri Lanka, a behavioural surveillance (BBS) survey was conducted in 2006/7 with MARP; however, a biological component was not included. With funding from the Global Fund to Fight AIDS, TB and Malaria (GFATM), Management Frontiers (MF) and the Royal Tropical Institute (KIT), under supervision from the National STD/AIDS Control Programme (NSACP), undertook the first ever IBBS Survey amongst MARP in Sri Lanka. A formative assessment (FA) was conducted in September 2014, to assess whether the use of Respondent Driven Sampling (RDS) as a methodology for the IBBS Survey would be feasible. The results of the FA showed that RDS would indeed be a viable sampling methodology, while also providing a wealth of information to assist with planning of survey logistics. The objectives of the IBBS survey were to estimate the prevalence of HIV and syphilis and associated risk behaviours amongst the four aforementioned MARP in Sri Lanka and to assess their use of and access to health and social welfare programmes.

## Methods

An IBBS survey among MARPs was undertaken from September to November, 2014. A total of 3,110 respondents participated in the survey across four districts (Colombo, Galle, Kandy, Anuradhapura), including FSW (n= 1,261), MSM (n=1,217), PWID (n=326) and BB (n=306). The four MARP surveyed across four districts resulted in a total of eight individual RDS surveys (e.g. FSW in Colombo, Galle and Kandy; MSM in Colombo, Galle, and Anuradhapura; PWID in Colombo; and BB in Galle). Participation in the survey was contingent upon meeting strict eligibility criteria and included a structured interviewer administered questionnaire using electronic data collection via tablets, as well as pre- and post-test counselling and rapid HIV and syphilis testing through blood sample collection via intravenous blood draw. Data was analysed using RDS Analyst (RDS-A), with univariate, bivariate and multivariate analysis undertaken, as well as comparison with other data sources from previous surveys, where possible. Furthermore, a small, qualitative component was also undertaken, to complement quantitative data where possible.

## Results

The desired sample size was met across all eight populations and districts. The maximum number of RDS waves reached in any of the eight surveys was 14 (BB in Galle) and the minimum number of waves reached was eight (FSW in Kandy). Convergence was reached, or borderline converging, across all key variables across all districts. Where convergence was only borderline, diagnostics do not result in great concern as the sample sizes were reached across all surveys.

The overall aggregate HIV and syphilis prevalence amongst FSW in Colombo, Galle and Kandy is 0.8% and 0.9%, respectively. While prevalence is low, most behavioural indicators amongst FSW are also low, including composite knowledge, testing, and reach of prevention programmes. Following the Global AIDS Response Progress Reporting (GARPR) guidelines, over a third of FSW exhibit comprehensive knowledge around HIV and AIDS (34.9%) and have been tested for HIV in the last 12 months and received their results (35.0%). Even fewer have received free condoms and know where an HIV test can be obtained (GARPR composite prevention programmes indicator).

However, despite these low behavioural indicators, condom usage is high, with most FSW having used condom at last sex with a client (93.0%).

The overall aggregate HIV and syphilis prevalence amongst MSM in Colombo, Galle and Anuradhapura is 0.9% and 2.0%, respectively, showing the highest HIV and syphilis prevalence across all of the MARP. A similar trend is seen amongst MSM as for FSW; prevalence is low, as are most behavioural indicators, with only condom usage at last anal sex showing elevated figures. Just under a third of MSM exhibit comprehensive knowledge around HIV and AIDS (30.7%) and less than a fifth have been tested for HIV in the last 12 months and received their results (15.4%) and have been reached by prevention programmes (19.3%) (GARPR composite indicator, received free condoms and now where an HIV test can be obtained). Just over half (57.9%) of MSM used a condom at last anal sex.

As PWID were sampled only from one survey site, population estimates are presented only for PWID in Colombo. No HIV or syphilis was detected, resulting in zero percent prevalence. The trend for PWID is dissimilar to both FSW and MSM, in that composite knowledge actually showed the best performance of all behavioural indicators, with just over a third (33.3%) answering correctly all five individual knowledge indicators. Less than a quarter of PWID used a condom at last sex (24.0%), and less than a tenth have been for an HIV test in the last 12 months and received their result (8.7%), and been reached by prevention programmes (4.1%). Just over half (50.7%) of PWID did not share a needle or syringe on the last day they injected drugs.

Similar to PWID, BB were only surveyed in one district, and as such population estimates are presented only got BB in Galle. No HIV or syphilis was detected, resulting in zero percent prevalence. Similar to FSW and MSM, the trend is same for BB, in that condom usage is high (67.6% used a condom at last sex with a tourist), while all other behavioural indicators performed poorly. A fifth (20.1%) of BB correctly answered all five individual knowledge indicators, and less than a tenth have been for an HIV test in the last 12 months and received their result (4.3%) and have reached with prevention programmes (7.8%).

## Conclusions

**HIV Testing:** While most MARP know where to obtain an HIV test, very few have ever been tested, and even fewer have been for a test in the last 12 months and received their results. Reasons for not getting HIV tests include not knowing where to go, too busy, and low risk perception. Those who have been tested, predominantly seek services at Government STD clinics, and are satisfied with the services; however, the qualitative and anecdotal reports from the IBBS sites, where respondents commented that treatment at the IBBS sites was far friendlier, more affordable, and with less wait times.

**Awareness and knowledge:** More than three quarters of MARP have heard of HIV and AIDS, but given the extent of awareness raising and programmes to date, and that these populations are more at risk, as well as more targeted by campaigns and resources, comprehensive knowledge should be higher. Main sources of HIV information are currently coming from health services, which raises the question around what impact the current campaigns have had to date. There is a clear need for an impact evaluation of the current awareness, information, education and communication (IEC) and social behaviour change communication (SBCC) campaigns. Few MARP mentioned NGOs as sources of information, and few MARP had contact with peer educators, and as such it would be interesting to see what impact and value for money the current modalities for raising awareness and reducing risk with MARP in Sri Lanka are actually having.

**Media:** Overall, media usage is not particularly high, with TV as the most frequent outlet, but radio and newspaper not showing high volumes of usage. Internet usage is poor (including amongst MSM), and therefore online activities and targeting should not be a priority at this time. Mobile

phones usage is high, providing the potential for m-health projects, as many of the key populations indicated they would be interested in receiving HIV and health related text messages.

**Alcohol and drug usage:** Alcohol and drug consumption amongst FSW, MSM and BB is not particularly high; however, amongst those few who have injected, most shared injecting equipment.

**Stigma:** High levels of HIV related stigma are present across all MARP and districts. While most respondents would be willing to care for an HIV positive family member, many do not believe an HIV positive student should be allowed to go to school, and would not buy food from an HIV positive food seller. High levels of stigmatization in society, lead to a non-conducive environment for safer sexual practices and access to health services.

**STI care seeking behaviour:** Most respondents go to Government STD clinics for HIV testing, but not when they have symptoms of an STI, the first point of call is typically a private pharmacy or chemist, illustrating that sentinel surveillance for STIs may be underestimated.

Additional MARP specific conclusions are specified below.

## FSW

While HIV prevalence is low and condom usage at last sex with clients is high, all other GARPR indicators are low (testing, knowledge, and reached with prevention programmes). Reasons for first entry into sex work are typically due to financial reasons (not having money or a job) and abandonment by husband, thereby showing potential for interventions with separated or divorced high-risk women, including skills training and livelihoods programmes. The average amount of money earned per last sex act is between 1,276 Rupees (Colombo) and 1,822 (Kandy), which when compared with the typical salary for a plantation worker is approximately four times higher, clearly illustrating a financial incentive for entry and maintenance in sex work. Three wheeler and truck stops are a commonly reported place where FSW meet clients, showing possibility for implementing interventions in three wheeler and truck stops and other areas of mobility, such as mobile clinics, IEC, etc. The most common location where sex is being exchanged is hotels, providing an opportunity for engaging with the private sector in a condom distribution strategy. A high number of FSW have been paid more for sex with no condom, and as such interventions targeting clients to raise awareness are needed, and condom negotiation skills building for FSW. Most condoms are currently obtained from private pharmacies, justifying engagement with the private sector, and potential for a public/private partnership for condom distribution.

## MSM

While HIV prevalence is low, overall MSM show poor performance on all GARPR indicators, including condom usage, testing, knowledge and reach of prevention programmes. Anal sex is high amongst MSM across all districts, alongside poor condom usage, clearly providing a pathway for the increased spread of HIV. Presence of sex with women is present, illustrating the potential for cross-spread between MARP and general populations. Many MSM have both sold and paid for sex, and the qualitative component further confirmed that identities and boundaries are sometimes blurred between MSM and sex work. These blurred sexual boundaries may be creating potential for multiple environments of risk, which are not well understood by service providers and should be taken into account for successful prevention and treatment and care programmes.

## PWID

While HIV prevalence amongst PWID is zero, high risk behaviour is present showing a conducive environment for the spread of HIV. For example, poor performance on all GARPR indicators, including



condom usage, testing, knowledge and prevention programmes, as well as safe injecting practices. Most PWID have been injecting for between 6 to 20 years. Frequency of injecting is not high, with most PWID only injecting two to four times a month, once a month, or less, which may be influenced by the shortage of heroin at the time of the survey. Heroin is the most commonly used drug during injections. There is a low prevalence of selling sex, including selling sex to obtain drugs; however, over a quarter have given money, goods or services to have sex with a partner. Condom usage is low, with typically less of a quarter of PWID using a condom at last sex with a partner. A common reason for not using condoms is never having heard of them, indicating the need for increased education and awareness. Unsafe disposal of injecting equipment (needles and syringes) is highly present, with most simply throwing them in the trash or in to open water, awareness campaigns around proper disposal are urgently needed with this community.

## BB

Prevalence of HIV amongst BB is zero percent, and condom usage at last sex with a tourist is high, however BB perform poorly across all other indicators including knowledge of HIV and AIDS, HIV testing, and prevention programmes. Most BB act as tour guides or work as hotel staff, and more than a third of BB have sex with tourists. Frequency of engaging in sex with tourists varies, with just under half indicating 'sometimes', and only just over 10% indicating 'every time'. More than a quarter received money the last time they had sex with a tourist. Most of the tourists with whom they have sex are European. Over two thirds used a condom last time they engaged in sex with a tourist.

## Recommendations

**1. Increase condom awareness and usage:** Formulation and implementation of a multi-sectoral national condom policy / strategy, which outlines expansion of condom promotion and distribution through expanded channels, including the potential for private sector collaboration, including pharmacies, hotels, around parks and public bathrooms and other venues. This strategy should include special attention to enhancing condom use in difficult situations (e.g. in parks, public bathrooms, or when having unplanned sexual contacts) and address activities to reduce police arrest on the basis of carrying condoms. Interventions with clients of sex workers to carry and use condoms should be implemented, and referred to in the condom strategy. Finally, creation of an enabling environment through ongoing advocacy for access to condoms would be the ultimate result of this comprehensive condom strategy.

**2. Increase HIV testing:** A multi-stage approach to increase HIV testing amongst key populations is needed. Firstly, a review of the current peer educator model to assess strengths, weaknesses and areas for improvement, is needed. Secondly, the current social and behaviour change communication (SBCC) interventions targeting key populations should be amended as needed, and where possible expanded, given the limited number of key populations who have been in contact with peer educators to date. These programmes should be closely monitored to report on how many existing and new clients are reached each month., The importance of HIV testing should be a primary focus, and peer educators should be supported to develop strategies and models for sourcing new key population sub groups, while maintaining contact with existing groups as well. Lastly, feasibility and acceptability of rapid testing has been proven, and therefore could be incorporated across STD clinics, in order to reduce waiting times (as mentioned as a positive for IBBS testing sites) so that clients could receive same day results.

Next, given the limited outlets for HIV testing currently, and the positive feedback from the IBBS sites, expansion of testing to additional outlets is needed. For example, moonlight HTC, outreach and mobile HTC. Furthermore, general health practice testing including provider initiated testing

and counselling (PITC) is a possibility. Health service providers can be trained to ask questions revealing high-risk sexual behaviour. If and when patients disclose to high-risk sexual activity, targeted messaging, including information on the importance of correct and consistent condom usage and the need for routine HIV testing should be conveyed.

**3. Increase participation to address HIV:** Documented approaches on key population engagement in similar contexts should be explored and piloted in the Sri Lankan context. For example, MARP led outreach, development of new and continuation of existing of MARP collectives and social groups, for strengthening of community systems. Specifically, an expanded harm reduction approach for PWID to address misconceptions around safer injection practices should be explored.

**4. Reduce stigma around key populations and HIV:** Social, institutional and personal stigma against key populations should be addressed through general population information and awareness campaigns. Furthermore, general population HIV awareness raising should continue, as HIV stigma is also present amongst MARP, and they can be reached through these same modalities for general HIV information. Furthermore, sensitization of key populations around HIV in general is needed. Lastly, sensitization of religious, political, community leaders and the media is needed to address HIV-related stigma and discrimination, supporting the development and adoption of policies that improve equitable and affordable access to prevention, treatment, care and support services and mainstreaming HIV into other sectoral strategies.

**5. Innovate with HIV interventions:** The potential for m-health interventions should be explored, given the high ownership of mobile phones amongst all key populations. M-health interventions range in scope from health and HIV/STI information blasts, to call centres and SMS response lines, to quizzes and competitions to engage young people in conversations and participation. The potential for m-health interventions should be explored, given the high ownership of mobile phones amongst all key populations. M-health interventions range in scope from health and HIV/STI information blasts, to call centres and SMS response lines, to quizzes and competitions to engage young people in conversations and participation. These interventions should be well planned out and evaluated for impact and cost effectiveness. Furthermore, exploring interventions to improve communication and ability to ask, respond and facilitate questions regarding sexual behavior between service providers and clients, and address motivation of clients to change behavior. It is suggested to explore “Motivational Interviewing”, a method that works on facilitating and engaging intrinsic motivation within the client in order to change behavior. Group settings and peer led interventions addressing issues of intimacy, relationships, coping skills, interpersonal skills, relapse prevention, sexual negotiation and communication skills could be considered.

**6. Additional research needs:** Review of the current peer educator model to assess strengths, weaknesses, impact and areas for improvement given the limited number of key populations who have been in contact with peer educators to date. As part of this review, the current BCC packages should be reviewed in detail, and result in the development of tailor made strategies for each MARP and sub-populations, as currently the existing package is generic. Operational research to explore and document community perceptions, identify gaps in knowledge, attitudes, and skills, and develop strategies to increase the correct and consistent use of condoms should be explored, and incorporated into the new national condom strategy. Exploration of the concept of ‘husbands of convenience’ amongst FSW could be explored, to delve into whether this is a protective factor around risk behaviour. Also, exploration of the links between the garment industry and entry into sex work could be investigated. Finally, it is highly recommended that STD clinic data collection be refined to capture catchment areas more clearly, to enable multiplier questions to be calculated from future IBBS survey data.

# 1. Introduction

## 1.1 Globally

More people than ever are currently living with HIV due to fewer AIDS-related deaths and the continued large number of new infections, with 2.5 million people newly infected persons every year. Millennium Development Goal (MDG) 6 of combating HIV/AIDS, malaria and other diseases remains a priority even though new HIV infections continue to decline in most regions globally. Despite the fact that the target to reach universal access to treatment for HIV/AIDS for all those who need it was missed in 2010, access to treatment for people living with HIV has increased globally, across all regions. At the end of 2011, 8 million people were receiving antiretroviral therapy for HIV<sup>1</sup>. In 2011, to make a difference, the UN pressed Governments in concentrated epidemic countries to put in place strategies that focused on the needs of populations at higher risk of HIV, including sex workers (SW), men who have sex with men (MSM) and people who inject drugs (PWID)<sup>2</sup>. Commitment to ending the HIV epidemic, pledging to focus on populations at higher risk and to build shared responsibility for achieving targets was outlined in the 2011 Political Declaration.

## 1.2 Sri Lanka

Sri Lanka is a Democratic Socialist Republic and an island situated in the Indian Ocean, southwest of the Bay of Bengal. Sri Lanka is separated from the Indian subcontinent by the Gulf of Mannar and the Palk Strait, with a population of 20.5 million<sup>3</sup>. Sri Lanka has been classified by UNAIDS as a country with a low-level HIV epidemic, with a national HIV prevalence of less than 0.1% that is non-generalized across the population. According to the Joint United Nations Programme on HIV and AIDS (UNAIDS) and the World Health Organization (WHO), an estimated 4,100 adults (15 years and above) were living with HIV/AIDS in Sri Lanka at the end of 2011, of which 1,400 are women. The male to female ratio amongst HIV positive persons in Sri Lanka is nearly 3:1 and the proportion of eligible people receiving antiretroviral therapy at the end of 2011 was between 20 to 39%<sup>4</sup>.

HIV is mainly transmitted through heterosexual sex, accounting for 82.5% of total cases; followed by homosexual and bisexual modes (11.3%), peri-natal (5.3%), blood transfusion (0.3%) and use of injecting drugs (0.6%). Sri Lanka is one of 9 countries worldwide (and one of four in the Asia Pacific region) where the number of people newly infected in 2011 was at least 25% higher than in 2001<sup>5</sup>. Risk behaviours are believed to be more concentrated among key populations such as FSW, MSM, beach boys (BB), prison inmates and narcotic drug users<sup>6</sup>. The first round of behavioural surveillance survey (BSS) results of 2006/7 also focused on drivers of three-wheeler taxis and factory workers from the Free Trade Zone<sup>7</sup>. In 2006/07 BSS, factory workers were included as a low risk group for HIV. Results confirmed that their HIV risk is as same as the general population.

Punitive policies, including both legal and policy frameworks, result in high levels of stigma and discrimination in Sri Lanka, for people living with HIV and AIDS. Both sex work and sex between men are prohibited by national laws and evidence implies that many populations at higher risk of infection delay testing and treatment because they are concerned about identification as part of a most-at-risk population (MARF), testing positive, and related confidentiality issues<sup>8</sup>.

## 1.3 Female sex workers

FSW are females who are selling sex in exchange for money or goods, in an array of contexts or venues including the streets, lodges/hotels, brothels, massage parlours, karaoke bars/nightclubs,

or from their homes. While HIV is low among FSWs with HIV prevalence remaining close to 0% as of 2009, it was detected to be 0.2% during 2003–2004 and reached 0.3% in 2006 in Colombo<sup>9</sup>. Data amongst this population is limited to the BSS undertaken in 2006 and 2007, however this survey did not include a biological component, as well as data from sentinel surveillance from NSACP STD clinics and the field undertaken since 1993. In terms of the United Nations General Assembly Special Session (UNGASS) indicators, Sri Lanka was only able to report on three of the five UNGASS indicators around sex workers in 2010, as follows: 42.6% of FSW have been for an HIV test in the last 12 months (Indicator #8), 89.3% of FSW used a condom at last sex with a client (Indicator #18), and a 0% reduction in HIV prevalence (Indicator #23). Indicators around prevention programmes (Indicator # 9) and comprehensive knowledge (Indicator #14) were not reported due to unavailability of data. The 2009 national population size estimation (PSE) exercise estimates approximately 14, 132 FSW in Sri Lanka (ranging from 12,329 to 15,935) across 3,683 hot spots<sup>7</sup>.

### **1.4 Men who have sex with men**

MSM comprise a key vulnerable population in Sri Lanka, often categorized into three groups as follows, male sex workers (MSW) (those paid in cash or kind for having sex with another male), Nachchis (effeminate males who have sex with other males), and other MSM (those who cannot be classified into either of the above categories). The current estimation of MSM in Sri Lanka is 7,551 (ranging from 6,547 to 8,554) across 1,438 hot spots<sup>5</sup>. Overall, 11% of the total reported HIV infections are attributable to homosexual transmission in Sri Lanka<sup>8</sup>. The MSM population was included as a surveillance group beginning in the 2008 HIV Sentinel Sero-Surveillance Survey (HSS) and HIV prevalence among this group has been rising steadily at close to 0% in 2008, 0.48% in 2009 and 0.9% in 2011<sup>8</sup>. There are large regional variations, for example in Kandy, a major city located in the Sri Lankan central province, HIV prevalence among MSM is estimated at 4% - more than 40 times the general population, although the desired sample size was not reached and this estimate should be interpreted with caution<sup>10</sup>. In 2012, reported levels of coverage of HIV testing among MSM was lower than 25%, whilst condom use among this key population was between 50 and 74%<sup>4</sup>.

### **1.5 People who inject drugs**

Current estimates of drug users (DU) in Sri Lanka show 12,618 DUs on a usual day (ranging from 11,009 to 14,214), less than two percent of which would be PWID (approximately 218), of whom nearly all would be sharing needles (on average 210 DUs sharing needles on a usual day)<sup>7</sup>. A study carried out in 2006–2007 among 278 DU in three prisons in Sri Lanka found that the prevalence of injecting drug use was higher than it has been officially reported (15.8% vs. 1%)<sup>11</sup>. In addition, there was a high prevalence of HIV risk-related sexual behaviour, for example lifetime prevalence of sex with a FSW was high (67%) and regular condom use with a FSW was low (14%).

### **1.6 Beach boys**

Mapping activities conducted in the 2006/7 BSS and in the 2013 National PSE activity revealed smaller size estimations than the previous estimate of 30,000 BB provided by UNDP. According to the 2013 PSE report, on average there are 873 BB in the country on a typical day (ranging from 752 to 993)<sup>6</sup>. The BSS 2006/7 reported 81% of beach boys have had vaginal intercourse with a woman and 45.4% have had anal intercourse with a man in the previous 12 months. The results further indicate that at least a third of men (including BB) who have anal intercourse with men are not using condoms and are at risk of HIV transmission in Sri Lanka (acquiring or transmitting).

## 1.7 Justification

Behavioural surveillance plays a key role in the monitoring and evaluation of a national response to HIV/AIDS, complementing epidemiological surveillance data that describe the rates of prevalence and incidence of HIV. Findings of these surveys provide a valuable resource in the assessment of the impact of HIV/AIDS policies and programmes. They give an appreciation of the levels of risk behaviours in sub-populations, particularly those with higher risks. Additionally, assessing the degree of adopting safer sexual practices by sub-populations to reduce the risk of HIV transmission in Sri Lanka. Last, but not least, these surveys provide insights into factors that facilitate the uptake of and barriers to safer behaviours. The first round of BSS took place in Sri Lanka in 2006/7, but as the title indicates, did not include a biological testing component<sup>12</sup>.

The purpose of behavioural surveillance is to assess trends in an epidemic and identify factors that impact a public health condition specific to the geographic area and population being studied. This “early-warning system” could provide important behaviour indicators that can predict the future course of HIV epidemic.

Most behavioural surveillance is now integrated and focuses on gathering data on HIV and STI prevalence and the associated risk factors. As part of an effort to improve epidemic tracking and programme planning, IBBS surveys are being conducted in selected geographical areas to assess risk behaviours and HIV and other STI prevalence among key populations, specifically FSWs, MSMs, and PWID. Correlation of behaviour and serology is the main objective of an IBBS survey.

Surveying key populations at higher risk of HIV in Sri Lanka, and globally, poses distinct challenges as these individuals are not easily accessible, usually hidden and hard to reach, due to fear of being stigmatized, harassed, detained or even arrested. While previous surveillance reports in Sri Lanka show that key populations do in fact congregate in distinct venues, for example FSW in bars, casinos or brothels, MSM in bars and beaches, and BB at the obvious location of beaches, due to the often concealed nature of these behaviours, and the lack of reliable population size estimation data available, obtaining an accurate and comprehensive sampling frame is challenging<sup>13</sup>. As such, respondent driven sampling (RDS) is a recommended methodology for these types of sub-populations, namely FSW, MSM, PWID and BB.

RDS is the current most widely accepted methodology to successfully to recruit key populations at higher risk of HIV worldwide, including FSW in Vietnam, Papua New Guinea and Somalia, PWID in Russia and New York, and MSM in Uganda and Bangladesh, to name just a few contexts where RDS has been successfully implemented<sup>14-22</sup>. However, RDS is not necessarily appropriate in every context, and as such it is necessary to conduct a thorough formative assessment (FA).

## 1.8 Formative assessment

The Formative assessment (FA) for the IBBS was undertaken between July 25th and August 18th, 2014, and focused on gathering information around four distinct categories as follows: social network properties, seed selection, acceptability of RDS and research in general, and survey logistics. Social network properties refer to whether members of the population form a social network, the size and diversity of that network, including existence of one network or multiple clusters. Seed selection refers to ‘how’ and ‘where’ to find appropriate seeds, such as natural leaders in the community and gatekeepers on certain sub group members, who will be the first respondents within the survey and who will start off the network referral chains. The research team purposively selects seeds. Acceptability assesses willingness of members of the population to participate in an RDS survey, have blood or other specimens collected, and what is the appropriate method for providing test

results. Finally, logistics refers to issues such as appropriate incentive amounts given the local context, days and times and under which circumstances they would participate in a survey, and information around design of the recruitment coupons used for referral. In order for an IBBS survey to be successful, formative research covering these areas is highly recommended, to optimize results of the survey.

The formative assessment included Key Informant Interviews (KIIs) and Focus Group discussion (FGDs) in four selected districts (Colombo, Kandy, Galle and Kalutara). A total of 37 KIIs and 14 FGDs, comprising a total of 146 respondents were included in the FA, as illustrated in Table 1 below. Key informants from the key populations and stakeholders from relevant ministries, Non-Governmental Organizations (NGOs) and Community Based Organizations (CBOs), and health facilities were purposively selected and interviewed to understand the contextual issues around key populations, and how to effectively work and reach these hidden populations. Interview guides were developed by the research team, based on guidance from the University of California San Francisco (UCSF) surveillance toolkit.

**Table 1: Results of IBBS Survey formative assessment**

District	Key Group and Respondents Sampled (# persons)				
	FSWs	MSM	IDUs	BBs	Total Respondents
Colombo	4 (KII) 16 (FGD)	4 (KII) 15 (FGD)	7 (KII) 15 (FGD)	-	<b>61</b>
Kandy	4 (KII) 17 (FGD)	-	-	-	<b>21</b>
Galle	4 (KII) 15 (FGD)	4 (KII) 8 (FGD)	-	6 (KII) 15 (FGD)	<b>52</b>
Kalutara	-	4 (KII) 8 (FGD)	-	-	<b>12</b>
Total FGD	<b>6</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>14</b>
Total KII	<b>12</b>	<b>12</b>	<b>7</b>	<b>6</b>	<b>37</b>
Total Respondents	<b>60</b>	<b>43</b>	<b>22</b>	<b>21</b>	<b>146</b>

The FA provided a thorough summary of the general organizational and contextual dynamics across four key populations, including FSW, MSM, PWID and BB. A great deal of information was collected, which assisted in planning for the simultaneous IBBS surveys amongst these four groups in the subsequent months. One of the most important findings of the FA, was that accessing the MSM group in Kandy was difficult, and given this outcome, the district of Anuradhapura was included in the IBBS survey protocol, while the district of Kalutara was removed. Overall, findings showed that IBBS surveys with all four key groups were feasible, a further detailed summary of the findings is presented below.

### **1.8.1 General Description of key populations**

Overall, general descriptions of subgroups and dynamics of high risk behaviour, including high risk sex and injecting drug use, were not different from previously reported in the literature, particularly the previous BSS in Sri Lanka, and the NSACP PSE report. No new or unknown categories or sub-populations were identified. However, noteworthy amongst the FSW group was that no known 'pimps' were revealed to be in play in the FSW populations, but the use of 'temporary husbands' by FSW for protection was found. This is a new phenomenon not previously described in the literature.

### 1.8.2 Willingness to participate and methodology

Overall, most groups report that they and their peers would be willing to participate in an IBBS survey, although provision of a cash incentive was repeatedly emphasized, particularly due to the fact that key populations will be asked to act as recruiters themselves. There was scepticism of this approach amongst FSW, noting that they may be the least likely to function well with a peer recruitment method, and that perhaps a venue based approach would be easier. However, if a venue based approach such as time location sampling were to be adopted for the FSW survey, this would only suit institutionally based FSW (e.g. massage parlours or spas) or street based if standard locations were identified. Given the illegal nature of sex work in Sri Lanka, it is unlikely that this venue-based approach would be viable. General consensus was that a peer recruitment method would work amongst all the other groups, with key populations highly networked, and therefore peer recruitment sampling (e.g. RDS) a viable method. Confidentiality was emphasized across all the groups as a key to requirement, to ensure wide participation.

### 1.8.3 Survey logistics

A great deal of information was been provided regarding survey logistics for the IBBS surveys. Across all groups, key populations preferred that the survey sites be set up in public, albeit safe, places, rather than at health facilities or clinics. The BB group suggested more mobile venues, shifting daily, given the mobility of this group, and the fact that their behaviour is not illegal, nor targeted by law enforcement, and therefore the sites can be more in the open than with the other groups. Opening hour preferences varied across the various respondents and groups, but generally FSW and BB preferred the daytime, as they work at night. PWID and MSM did not show any particular trend in preference for opening hours of sites. All groups did not seem to mind the use of tablets or smart phones for the use of electronic data collection, nor did mind sharing a survey site with other key populations. A suggestion to have different times for the various groups was offered.

## 2. Research objectives

The overall objective of the IBBS survey was to establish epidemiological and behavioural risk correlates of HIV and STI among four key populations in Sri Lanka, and to correlate behaviour and serology, and specifically:

- To estimate the prevalence of HIV and associated risk behaviours among FSW, MSM, PWID and BB in Sri Lanka
- To assess the use of and access to health and social welfare programmes among FSW, MSM, PWID and BB in Sri Lanka

## 3. Methodology

### 3.1 Overview of RDS

Worldwide, FSW, MSM and PWID comprise highly stigmatized populations making them hard to reach through conventional population-based survey methods. In response, specialized surveillance methods have been developed that attempt to approximate probability-based sampling through mapping venues of key populations concentrations (e.g., time-location sampling (TLS) or through peer referral (e.g., RDS)). RDS has been chosen as all four key populations are hard to reach and hidden, and the FA confirmed that this survey design was feasible. Further statistical arguments for sampling hard to reach populations using RDS are presented below.

The theoretical underpinnings of RDS have been well established in published literature<sup>23,24</sup>. In brief, RDS begins with the selection of seeds who are known members of the key population. The seeds are instructed to refer a limited number of peers from their social circle, who in turn are enrolled (if eligible) and instructed to refer other peers and so on. The number of referrals per person is usually restricted to three in order to ensure that recruitment chains progress through diverse social networks. Coded coupons are used to link who refers whom. A primary incentive is given for completion of the survey and secondary incentives are given for each successfully referred peer. RDS reduces the biases inherent in referral methods through statistical adjustments that attempt to account for social network size and similarity among persons within social networks. Although sampling begins with a purposely chosen set of initial subjects, the composition of the final sample approaches independence from the starting point. Recruitment progresses until both the sample size is met and equilibrium and convergence (e.g. stability with respect to the composition of the sample) is achieved.

Specialized analysis (e.g. using RDSAT or RDS-A software) is used to produce population prevalence estimates and confidence intervals of variables adjusting for unequal probabilities of inclusion due to varying social network sizes and the similarities in characteristics of persons within their social networks. To conduct analysis, the survey must link enrolled participants to the friends whom they refer and ask the number of persons in the participant’s social network who would be eligible for recruitment into the survey (e.g. network size).

**3.2 Selection of survey locations**

Four districts were selected for inclusion in the IBBS survey, following results of the FA and the August 2014 SAC meeting. Criteria included in the selection included population sizes of the districts, current size estimates of key populations in each district, and access from Colombo. The breakdown of which key populations were surveyed in each district is described in Table 2.<sup>1</sup>

**Table 2: IBBS survey sites and populations surveyed**

Districts	Key Populations Surveyed
Colombo	FSW
	PWID
	MSM
Kandy	FSW
Galle	FSW
	MSM
	BB
Anuradhapura	MSM

**3.3 Eligibility criteria for participant selection**

In an effort to allow for comparability across multiple rounds of surveillance, as well as other research studies in Sri Lanka, the same definitions as used in the National PSE activity were utilized for this IBBS survey.

<sup>1</sup> Note: Survey sites were not selected based on Global Fund programme coverage



- FSW: Any female, who has sold sex in exchange of money or goods in the past six months.
- MSM: Men who have had sex with another men in the past six months as a matter of preference or practice, regardless of their sexual identity or sexual orientation, and irrespective of whether they also have sex with women or not.
- PWID: A person who has been injecting drugs during the 12 months preceding the study.
- BB: Males who cruise in and around beach areas, and associate with tourists as guides, animators or providers of any form of gratification including insertive and receptive sex (homosexual, heterosexual or bisexual orientation), during the previous 12 months.

Additionally, eligibility criteria include:

- Above 18 years of age
- Able to provide verbal informed consent (e.g. are not under the influence of alcohol or other drugs)
- In possession of a valid peer recruitment coupon
- Reside, work and/or socialize in the survey area for at least for the duration as indicated in the definition per group

Finally, the following exclusion criteria were used:

- Previous participation in this IBBS survey (i.e. a participant can only participate once)
- Inability to provide informed consent (including persons incapable of providing consent due to the influence of alcohol or drugs)

Nationality and citizenship were not valid inclusion or exclusion criteria under the rationale that foreigners living in Sri Lanka may form part of the key populations in the survey areas.

### 3.4 Sample size

The sample size calculation followed the same protocol as used in the BSS in 2006/7, using condom use with non-regular partners as the indicator of interest for the calculation. As recorded HIV prevalence is so low across the groups, condom use indicators appear practical. The sample size calculation used is as follows:

$$N = (z)^2 P(1-P) / W^2$$

N      Sample Size

Z      Z Score corresponding to CI

P      Expected proportion with outcome of interest

W      Width of the interval (e.g. margin of error, +/-3% is 0.06)

Based on the sample size calculation with a 95% confidence interval and ±5% precision, the following sample is needed from each target group to detect a difference of plus or minus 10%. The initial calculation without taking into account design effects generated sample sizes half those listed below, but with a design effect of 2, as recommended in RDS studies, the sample size for each target group is provided below\*. Recruitment continued until which point the desired sample size was reached, in addition to attaining convergence on key variables, while also balancing project time constraints and human and financial resources. Convergence was checked midway through data collection, and upon completion of data collection. Key indicators from the behavioural survey

\* Note: Survey sites were not selected based on Global Fund programme coverage

conducted in 2006/7 are presented in Table 3 as well the required sample sizes for various key indicator(s) covering the four key populations. According to these sample size calculations, the total minimum sample size was to be at least 2,678.

**Table 3: Key indicators used to determine sample size**

	Indicators Considered (P)	Survey results	N	N with design effect (*2)
1	% FSW used condom correctly every time past 12 months paying partner - Lowest (casino)	39.4	367.89	734
2	% FSW used condom correctly every time past 12 months paying partner - Highest (street)	81	236.49	473
3	% MSM used condom correctly every time last 12 months non-regular partner (BSS 2006/7)	36.1	354.47	709
4	% DU (male) used condom correctly last 12 months non-regular partner	18.8	234.58	469
5	% IDU (female) used condom correctly last 12 months non-regular	9.1	127.11	254
6	% Beach Boys used condom correctly every time last 12 months non-regular partner	47.2	382.96	766
			<b>Total Sample Size</b>	<b>2,678</b>

HIV prevalence per key population was not used to calculate the required sample size given that a low HIV prevalence (as in the case of Sri Lanka), would yield excessive large calculated sample sizes to give an accurate assessment. For RDS, a minimum requirement for sample size per distinct population requires an average minimum sample size of 250 in order to reach convergence on key variables. Inflating the sample size by 10% to ensure sufficient samples size to be reached per key population by the end of data collection would yield the following required sample (per key population), based on the calculations in Table 4.

**Table 4: Required sample size per key population**

	Key Population				
	FSWs	MSMs	DUs/IDUs	BBs	Total
Required sample size using a few selected key indicators	807	800	515	810	2,932

The distribution of a proposed sample size for the IBBS survey of approximately 3000 is displayed in Table 5. This distribution takes into account the estimated population sample sizes (National PSE 2013) per key population and district, and a minimum required sample per key population and district (minimum of n=250).

**Table 5: Required sample size per key population and district**

District	Key Group and proposed coverage				
	FsWs	MSMs	IDus	BBs	Total
Colombo	600	500	250	-	1,350
Kandy	350	350	-	-	700
Galle	300	350	-	300	950
<b>Required Sample Size</b>	<b>1,250</b>	<b>1,200</b>	<b>250</b>	<b>300</b>	<b>3,000</b>
<b>MARP estimation 2013</b>	<b>14,132</b>	<b>7,551</b>	<b>423</b>	<b>1,314</b>	<b>23,420</b>
<b>Sample as a % of MARP estimation 2013</b>	<b>9%</b>	<b>16%</b>	<b>59%</b>	<b>23%</b>	<b>13%</b>
<b>% of Sample</b>	<b>42%</b>	<b>40%</b>	<b>8%</b>	<b>10%</b>	<b>100%</b>

Due to very low population estimates for beach boys - in general, as well as in Colombo and in Kandy - a sample of 300 was proposed in Galle; with an estimated number of beach boys of 444, Galle has the second highest estimate after Ampara (estimate of 453). Despite a population size estimate of 226 for MSMs in Galle, all efforts were made to reach a sample size of 250 since indications after a field visit suggested an underestimation of MSMs. The population size estimate for IDUs in the country is low, namely 218; therefore reaching a sample of 250 was thought to be a challenge, but was agreed as the target.

The equilibrium, and convergence, is the point at which the RDS sample proportions for each variable no longer change (or change very minimally) regardless of how many more individuals are recruited. While equilibrium was not reached in the BSS in 2006/7, every effort was made to reach equilibrium in this study, across all groups, to be described further in subsequent sections. Comprehensive formative research and ensuring diversity of selected seeds was a key risk reduction strategy to ensure sufficient waves to reach equilibrium.

### 3.5 Behavioural questionnaire

Standardized data collection instruments adapted for key populations in Sri Lanka, and comparable with the 2006/7 BSS where possible, were used for quantitative data collection. Data items included indicators needed to track the HIV epidemic and the national response for key populations, conforming to international standards (e.g., GARPR indicators, local Key Performance Indicators), national programme needs, and comparability with similar surveys in the region. These instruments collected data on demographics, behaviours potentially correlated with HIV, symptoms of STI among key populations, as well as on HIV-related knowledge, attitude, practices, stigma, discrimination, and risk perceptions.

The training of interviewers included a question-by-question discussion and consensus-building process on how to ask each question based on intent and current terms in common usage. The questionnaire was administered using a tablet with Open Data Kit (ODK). All respondents were comfortable with the use of electronic data collection, and therefore paper based forms were not needed (although were stocked at each site in the event they were required).

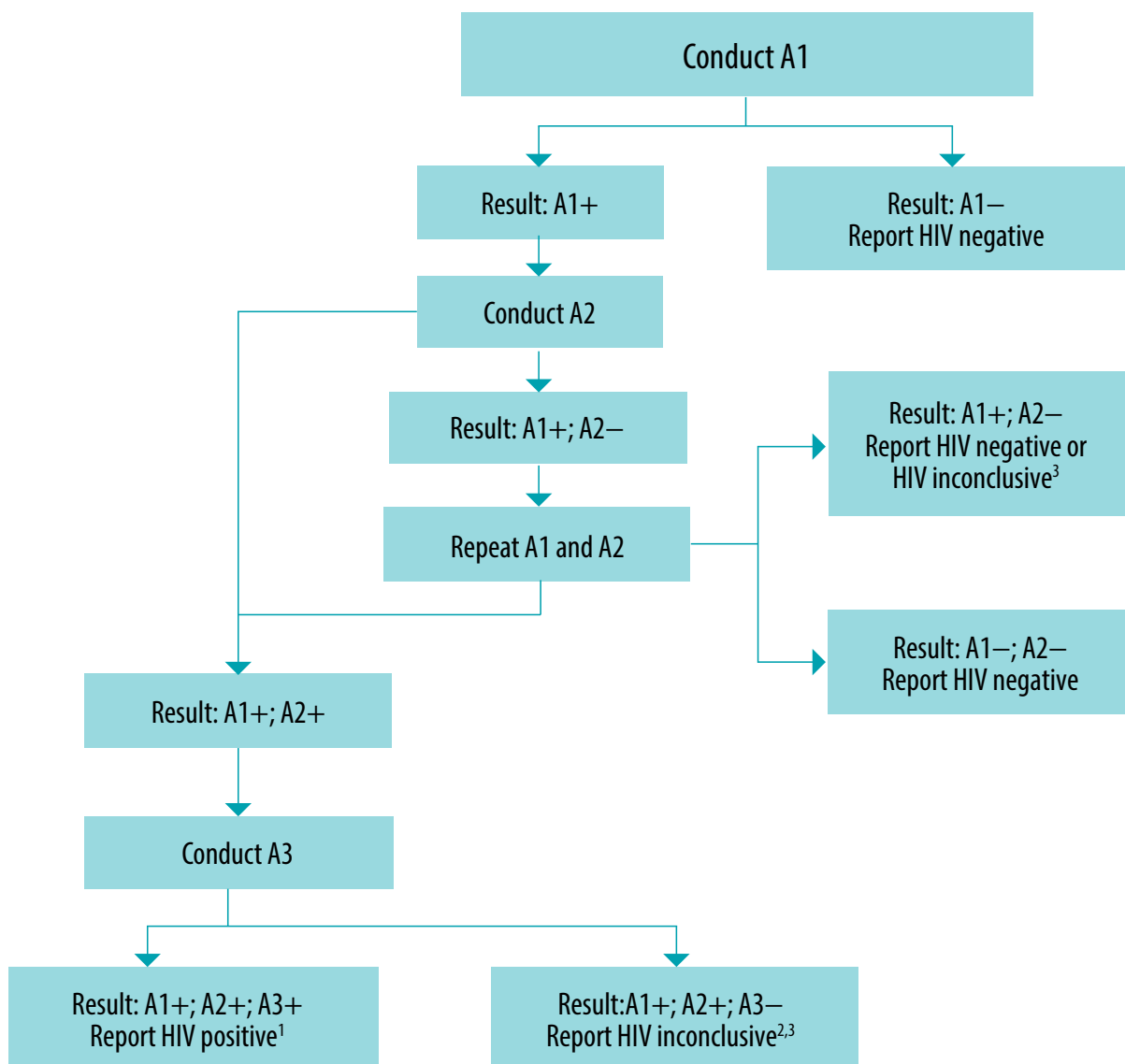
### 3.6 HIV and STI testing

Serological testing for HIV and syphilis was done using rapid, point-of-care tests on site using whole blood from an intravenous blood draw. Rapid tests have the advantage of generating same day results within a short period of time and require minimal skills and equipment. The type of testing used was linked anonymous chosen because it allows the client to know their HIV status and be referred for services at the same time with minimum identifiers (in order not to breach confidentiality). The confidentiality of the respondent was maintained as the nurse counsellor was the only person on site to know respondents' test results. All participants received post-test counselling, with specific messages tailored to their test result. All positives were referred to the nearest STD clinic for further evaluation, management and follow up, as needed. A description of the serial testing strategy and test kits used is described below.

- **HIV testing:** Serial testing was done according to the algorithm for HIV testing in low prevalence countries<sup>26</sup>. Only WHO recommended and pre-qualified testing kits were used, as follows. The first test used was Alere Determine HIV rapid test kit. Non-reactive results were considered to be negative. The reactive results were further tested with a second test kit - SD Bioline HIV 1/2 rapid test. The third test kit was HIV 1/2 STAT-PAK was used according to the algorithm outlined in the below, when the results were indeterminate with the first two assays. All positive samples were sent to NSACP for confirmation of the HIV status according

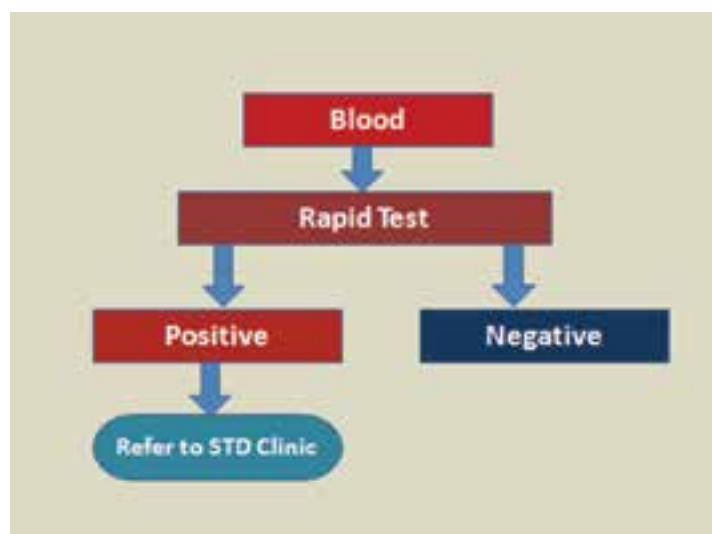
to the national algorithm. Quality assurance was ensured by rechecking every 10th negative sample and all the positive samples by the National reference laboratory of NSACP. The figure below illustrates the algorithm for the HIV testing.

**Figure 1: HIV testing algorithm**



- **Syphilis testing:** the blood samples were subjected to an immunochromatographic rapid assay - Determine Syphilis TP, to determine the serological evidence of Syphilis according to the algorithm given below in the below figure. Those that tested negative were declared as negative and the samples which showed reactivity with rapid test were sent to NSACP for testing VDRL titre (>8 considered positive for active syphilis), which is necessary for determining active syphilis in the respondents. The confirmatory testing was also performed at NSACP laboratory. All positive, respondents were referred to the nearest STD clinic for follow up. For quality assurance purposes, all positive samples and 1 in every 10 negative samples were sent to NSACP.

**Figure 2: Syphilis testing algorithm**



### **3.7 Quality assurance, monitoring and supervision**

#### **3.7.1 Behavioural component**

MF took the lead in the monitoring and supervision of the IBBS sites, with support from KIT, NASCP, and the SSC. The field team supervisor (FTS) visited each site on a bi-weekly basis to ensure the quality of data collected, and accurate and prompt uploading of data to cloud, accurate maintenance of site records, accurate maintenance and update of the coupon management system and payment of incentives to the respondents and upkeep of equipment, etc. Additionally, the team leader and the project manager visited each site on a bi-weekly basis and the project public health specialist conducted in depth monitoring in the first week of operations after commencement of the survey at each site, and on a bi-weekly basis thereafter to ensure the team was adhering to the study protocol, review of hard copy data collection forms and electronic data entry sheets, quality of interviewing, workload of staff, recruitment flow, etc. In addition to the above, three KIT officials visited the sites through the survey data collection period for monitoring and quality assurance. Reports of these visits were shared with the project coordinator and study coordinator and were included in the first mid-term report. Furthermore, the SAC monitored the progress of the survey and had meetings with the consultants monthly. There were five SAC meetings held between June and November. Lastly, staff members from NASCP visited the sites many times and observed the operations on site.

#### **3.7.2 Biological component**

Quality assurance was achieved by internal quality control and external quality assurance. Quality assurance measures included training of all staff in documentation, including labelling of specimens and completion of registers (site registration book and HTC delivery and results book), and rechecking of all positive samples and one in every tenth negative. A workshop on accurate performing of the rapid tests and adherence to test algorithm was conducted with all HTC nurses before commencement of the survey. The HTC notebooks for each HTC nurse were signed off by the FTL at the end of each day, and these logs were checked by the bio component FTL on a weekly basis. The microbiologist also visited and inspected the site operations in relation to the bio component and ensured the correct performance of tests including adherence to the study protocol (e.g. testing algorithm, one in every ten samples sent, and every positive sample and pre and post counselling, waste management, cool chain as well). The external quality assurance was obtained by the national reference laboratory of the NSACP. Quality assurance was ensured by rechecking

every 10th negative sample and all the positive samples for HIV and syphilis by the National reference laboratory of NSACP. The reference laboratory issued a report on monthly basis on quality assurance which included a detailed description of test result evaluations with discrepancy rates as well. Any deviations in the reported discrepant results of study respondents (via rapid testing on site) and the National lab results, were carefully reviewed for human or other errors.

## 4. Data management and analysis

Survey data was entered in electronic format directly by the interviewer during the interview process using ODK<sup>27</sup>. To ensure quality of data, built in checks were programmed into the questionnaire and verification of completeness and internal consistency was performed automatically. Additionally, the site supervisor (e.g. field team leader (FTL) in most cases) reviewed every survey form at the end of every day.

All paper-based tools (network size forms, recruiter forms, etc.) were entered daily at the survey site by the coupon managers into an excel database, reviewed by the site supervisor, then sent in to the FTL. Coupon tracking was monitored using an excel data management sheet, piloted in IBBS surveys in Somalia and Kenya. On a monthly basis the NSACP laboratory in Colombo sent the biological test results to the project microbiologist for review, and then sent to the study coordinator and statistician for merging with the biological data.

RDS Analyst (RDS-A) software package (Version 3.1.2 with RDS package version 0.7, [http://wiki.stat.ucla.edu/hpmrg/index.php/RDS\\_Analyst\\_Install](http://wiki.stat.ucla.edu/hpmrg/index.php/RDS_Analyst_Install)), was used for analyses. RDS-A is software developed for analysis of RDS data, which produces population point prevalence and 95% confidence intervals for all indicator variables. RDS also produces survey weights.

As a basic surveillance activity, the primary analyses presented in this report are adjusted population estimates of disease prevalence (HIV), key risk behaviours (e.g., unprotected sex), and access to and use of HIV prevention programmes and services. Stratified analyses is also presented, where appropriate, to identify sub-populations at higher risk.

## 5. Qualitative component methodology

While the IBBS survey itself is quantitative in nature, to effectively inform HIV programs and interventions, as well as to adequately empower national policy makers, use of a “mixed methods approach” is strongly advised. As such, the IBBS proposal included combined quantitative and qualitative methods, with triangulation of this data. The original objectives of the qualitative component were to purposively sample key informants from key populations, relevant ministries, NGOs and CBOs working with these populations, as well as health facilities. However, after completion of the FA, and after the start of the survey, it was decided that the qualitative component would solely focus on the key populations themselves, given only a few days were available on two short monitoring visits by KIT advisers.

Face to face interviews with respondents who participated in the IBBS survey were conducted between September 30th to October 4th, and November 3rd - 7th, 2014. Interviews were conducted by two KIT advisors with international qualitative experience, along with interpreters. Interviews were conducted at the IBBS site in Colombo, in a hotel in Kandy, and at the beach and at an outreach site in Hikkaduwa. Respondents were recruited by outreach workers and by the FTL at the IBBS site.

In all cases the respondents were asked whether they would like to participate, were explained the aims, duration, impact and risks of the interview, and verbal non-written consent was obtained.

Permission was also granted to record the interview. There were no cases of participant's declining to have the discussions recorded. Participants were assured that confidentiality would be maintained, that their names would never be linked to the contents of the interviews, and no identifying information would remain. This section of the IBBS report presents select quotations from the transcripts of the interviews.

A total of 32 interviews were undertaken across two different monitoring visits in September/October and November 2014, with members from all four key populations (FSW, MSM, BB and PWID), across three of the four survey districts (Colombo, Galle and Kandy), presented in Table 6. Additionally, one interview was conducted with a nurse at the IBBS site in Kandy, making a total of 33 qualitative interviews.

**Table 6: Summary of qualitative interviews with key informants**

District	FSWs	MSM	PWID	BB	Other	Total Respondents
Colombo	2+5	4+4	2+3	n/a	-	20
Kandy	1+2	n/a	n/a	n/a	1	4
<b>Galle</b>	1	1+2	n/a	3+2	-	9
<b>Anuradhapura</b>	-	-	-	-	-	-
<b>Total Respondents</b>	11	11	5	5	1	33

## 6. Ethics approval

The IBBS survey protocol was submitted and accepted for ethical approval in Sri Lanka to the Faculty of Medical Sciences of the University of Sri Jayewardenepura and internationally to KIT (Annex-D).

## 7. Interpretation of results

From early September to late November 2014, a total of 3,110 respondents were interviewed for the survey, across four key populations, in 4 districts in Sri Lanka. All 3,110 respondents provided blood samples and were tested for HIV and syphilis. The following results present the data by population group per site, followed by a summary section of aggregate data across districts, per population. Where relevant, this information will be complemented by the qualitative data obtained through the 32 qualitative interviews with members of the four key populations.

The biological testing discrepancy rate between the rapid testing on site and the quality control testing done at the NSACP reference lab less than 5%. The SAC reviewed all discrepancies and found the discrepancy rate to be acceptable according to the research protocol.

In the results sections to follow data is presented in the form of both the sample proportions (e.g. crude data from the samples) and also the population prevalence estimates (adjusted based on network size and associated weights using an RDS estimator). Where population estimates are not provided, this is due to small sample sizes, and therefore population estimates could not be calculated (indicated by a dash/hyphen (-) in the tables). Due to the small sample size, p values for significance have not been included throughout, but mostly mentioned in relation to confidence intervals. All Global AIDS Response Progress Reporting (GARPR) indicators are highlighted in grey in the data tables presented.

Aggregate estimates are provided for FSM and MSM, as data was collected across multiple districts. However, care should be taken in extrapolation. Aggregate estimates are not national estimates as RDS cannot give a national estimate, since it is based on social networks. Even key populations in small countries do not have a single social network. With the current data, using any weights to produce a national estimate is challenging, as we do not have a basis for assumptions for other locations in the country. Given these limitations, aggregate estimates have been provided for a few select key indicators; however, population estimates presented separately for each of the three districts should be considered more relevant than aggregate estimates.

The objective of RDS is to meet equilibrium, also known as convergence, on key variables.<sup>2</sup> The first group of key variables of interest tested across all populations were GARP indicators, including HIV prevalence, syphilis prevalence, HIV/AIDS-related knowledge, HIV testing, and whether they had been reached by prevention programmes in the last 12 months (all groups), as well as condom usage at last sex with a client (FSW) / anal sex (MSM) / sex with a tourist (BB), and used a clean needle/syringe at last injection (PWID only). One additional socio-demographic variable was also included across all populations - age of respondents.

Another important concept in RDS is network size, the number of peers the respondent knows, as part of the same population. This data was collected in two ways, first as part of the questionnaire, in a variable labelled 'NET', in section nine, asked by the interviewer. However, after data collection commenced it was noticed through M&E visits and continual data analysis that there was a great deal of missing information for these questions. As such, the IBBS survey team, in collaboration with the SSC, decided to implement a second way of collecting this information, through a dedicated separate network size form (NSF), administered by the coupon manager. Using the Pearson correlation coefficient ( $r$ ), the association between NET and NSF was checked. Given the strong correlation between these two indicators, and a substantially smaller proportion of missing data for the indicator NET, in particular after the implementation of the NSF and the additional training of staff, we have decided to use NET in calculating population estimates across all populations. Conversely, a squared Pearson correlation coefficient – coefficient of determination, or  $r^2$  – represents the % variation in  $y$  that can be explained by  $x$  (goodness/strength of fit). Pearson's  $r$  is standardized in interpretation whereby labelled as very weak positive correlation if  $0 \leq r \leq 0.20$ , weak if  $0.21 \leq r \leq 0.4$ , moderate if  $0.41 \leq r \leq 0.6$ , strong if  $0.61 \leq r \leq 0.80$ , very strong if  $0.81 \leq r \leq 1.0$ , and very weak negative correlation if  $0 \leq r \leq -0.20$ , weak if  $-0.21 \leq r \leq -0.4$ , moderate if  $-0.41 \leq r \leq -0.6$ , strong if  $-0.61 \leq r \leq -0.80$ , very strong if  $-0.81 \leq r \leq -1.0$ . In summary, the correlation between NET and NSF has been done to justify use of the question in the questionnaire (NET). Overall, the NSF was a better tool. If the association between NET and NSF is statistically significant, the use of NET is justified. Also, for PWID the NET question was not available, so only the NSF was used, and, subsequently, no correlation is provided.

Additionally, bottleneck plots are also presented, which helps to ascertain if seeds diverge into different subpopulations. In RDS-A the Gile's SS estimator (28) (used in this analysis) is designed to account for these dynamics, and therefore not a great deal of emphasis is placed on this diagnostic test, nevertheless it is presented across all populations and sites.

Furthermore, "homophily" is an RDS term and describes the tendency for respondents to recruit people who have the same traits as themselves. More specifically, in RDS-A, this is the ratio of the number of recruits that have the same characteristic as their recruiter to the number we would expect if there were no homophily on the characteristics. A homophily value of 1 means there is no homophily. The values above 1 show presence of positive homophily (people are recruiting similar to themselves), values below 1 mean negative homophily (people are recruiting different from

<sup>2</sup> The term equilibrium is used in RDS-AT, while convergence is used in RDS-A



themselves). The value can be interpreted similar to an odds ratio. For key variables of interest, homophily is presented.

In terms of the multivariate analysis provided, it is important to note that one of the side-effects of RDS analysis, it that it makes results of bivariate and multivariate analysis more often statistically significant. As such, the frequently reported high P-values should be interpreted with caution.

Finally, the recommended estimator (Gile's SS) in RDS Analyst (RDS-A) requires a population size estimate for each survey site. Other estimators assume that the population is infinity, which can result in over adjustment. The other extreme is when the population size estimates are close to the sample size (as was the case with the current national PSE estimates from Sri Lanka). This results in under adjustments, because when a substantial proportion of the population is sampled there is no theoretical basis for adjustments, as the sample is practically census. Also, it is highly unlikely that substantial proportion of key populations is reached by RDS, as they are hard-to-reach populations. Population size estimate can be entered in two ways in RDS-A: either, as mid estimate, or as a range (low and high estimate). These are the steps that were used to calculate PSE for RDS-A for this shown, and as shown in table below.

1. National population size estimates are used as base<sup>7</sup>. For FSW in Colombo estimates from the mapping of key populations is used as base per recommendation of NSACP. If the estimates are at least 5 times larger than the sample reached they are used as mid estimate in RDS-A (Colombo FSW and Colombo MSM). Otherwise, the next steps are done to overcome potential under adjustments.
2. If the sample size reached is larger than national estimates, the sample size is used as low estimate (Colombo PWID, Gale MSM, Gale BB, Anuradhapura MSM); otherwise national estimates are used as low estimate (Kandy FSW, Gale FSW).
3. It is estimated for Asia and Pacific that 0.24% of the population are injecting drugs. This estimate is used is used to calculate the high estimate for the PWID in Colombo using total district population as denominator.
4. To calculate the high estimate for FSW in Kandy and Galle, the proportion of FSW in Colombo of total district population is calculated ( $6,157/2,309,809 = 0.27\%$ ) and applied to total district population in Kandy and Galle.
5. The same approach as for FSW is used to calculate high estimate for MSM in Galle and Anuradhapura. ( $3,991/2,309,809 = 0.17\%$ )
6. For BB, as no better basis for estimation is found, the same high estimate for BB is used as for MSM. This is reasonable as national estimate for MSM and BB in Galle are similar.

**Table 7: Population size estimation figures for RDS-A**

Site	Total District population [2]	Group	Sample size reached	National estimates	To be used in RDS-A		
					Low	Mid	High
Colombo	2,309,809	FSW	605	8,332		8,332	
		MSM	504	3,991		3,991	
		PWID	326	179	326		5,544
Kandy	1,369,899	FSW	354	709	709		3,699
Galle	1,058,771	FSW	302	324	324		2,859
		MSM	355	226	355		1,800
		BB	306	267	306		1,800
Anuradhapura	856,232	MSM	358	292	358		1,456

# Female Sex Workers

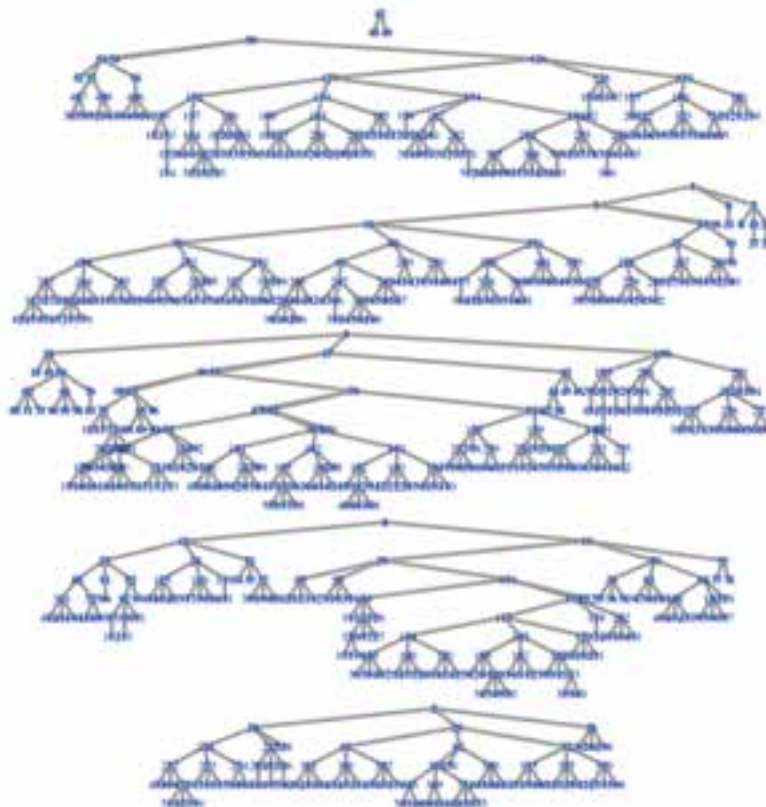


## 8. Female Sex Workers

### 8.1 Colombo

A total of 605 FSW were recruited in Colombo, surpassing the target sample size of n=600. Six diverse seeds were recruited through contacts with NGOs and through contacts from the FA. Two of the seeds were street based, one hotel/brothel based, one street/brothel based, one lodge based, and one hotel, massage centre based. In the beginning FSW were only interviewed at the central Colombo IBBS data collection site, but within the last month of data collection the IBBS team undertook outreach to areas where coupon holders were located, resulting in approximately 29% of respondents being interviewed and tested with the mobile IBBS team in the field. The RDS-A Gile's SS estimator was used with a population size estimate of 6,157, confidence interval of 0.95 and 5,000 bootstraps.<sup>3</sup>

**Figure 3: Recruitment tree, FSW Colombo**

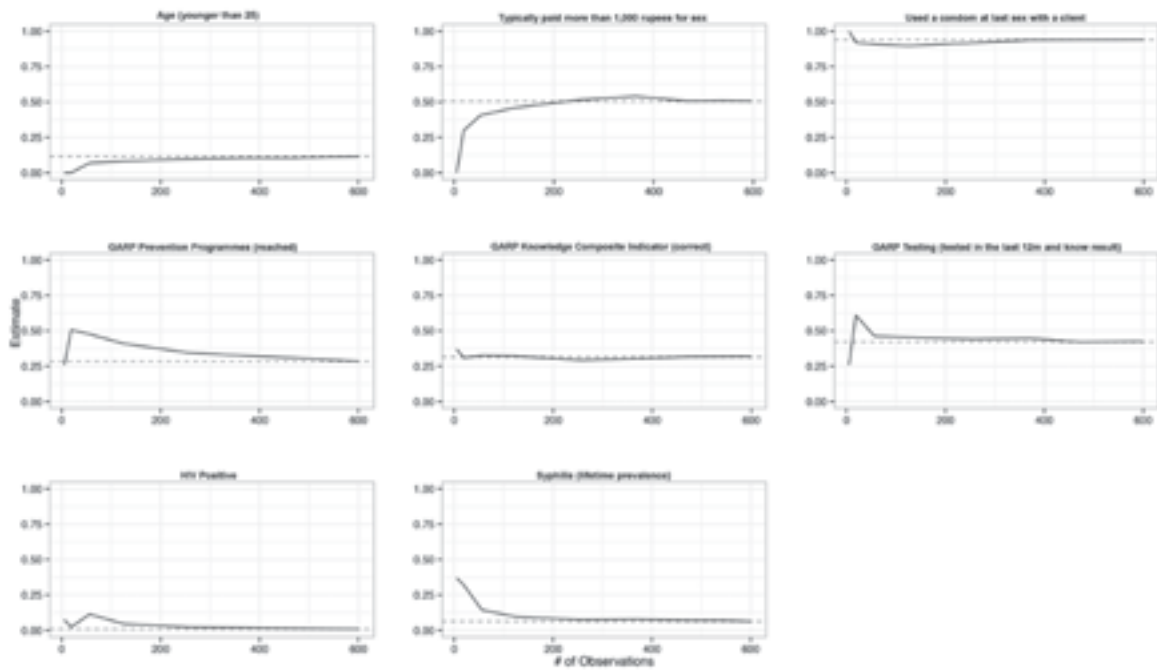


#### 8.1.2 Convergence

Convergence was reached on seven of eight key indicators (Figure 4) The eighth indicator for GARP prevention programmes is borderline converging, very close to the estimate, therefore likely having no effect on the interpretation.

<sup>3</sup> Pearson's correlation coefficient ( $r$ ) represents the strength of the association between variables: very weak if  $0 \leq r \leq 0.20$ , weak if  $0.21 \leq r \leq 0.4$ , moderate if  $0.41 \leq r \leq 0.6$ , strong if  $0.61 \leq r \leq 0.80$ , very strong if  $0.81 \leq r \leq 1.0$

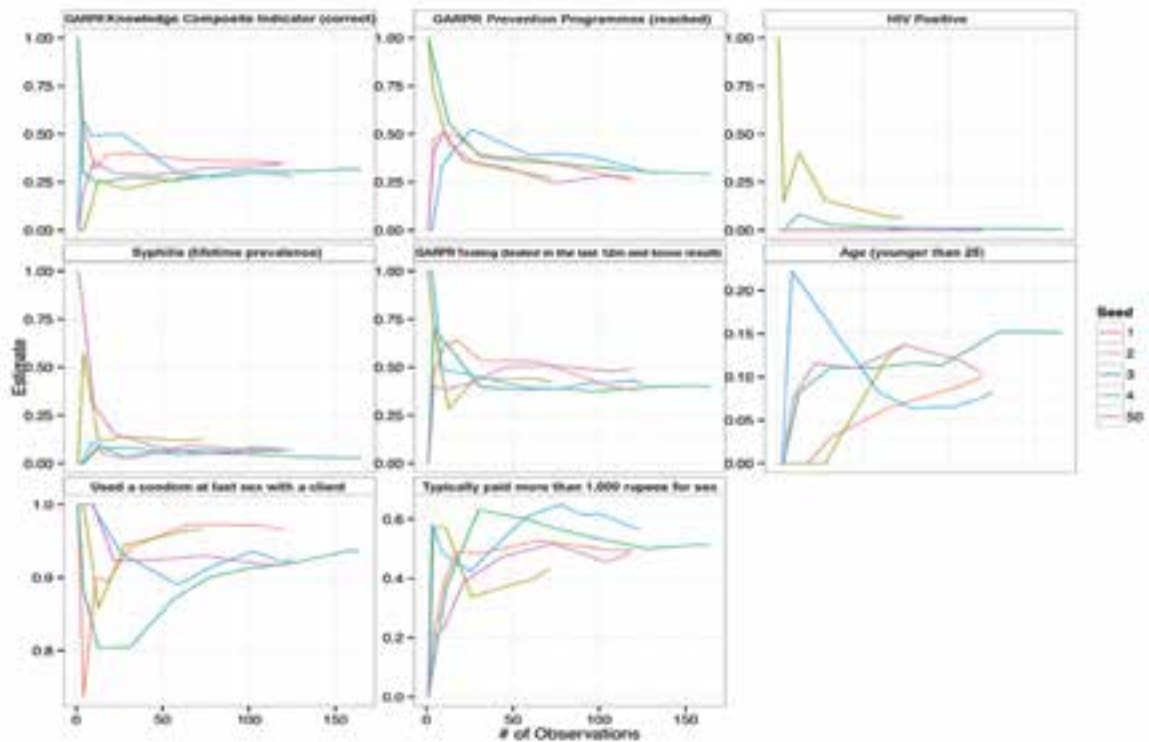
**Figure 4: Convergence of key variables, FSW Colombo**



**8.1.3 Bottleneck plots**

The bottleneck plots for FSW in Colombo show no areas of concern (Figure 5) One seed has slightly diverged into younger FSW near the end of the survey, however this is unlikely to be cause for concern. The sixth seed that did not produce a recruitment chain has been excluded from the bottleneck plots.

**Figure 5: Bottleneck plots, FSW Colombo**



### 8.1.4 Homophily

As mentioned earlier, a homophily value of 1 means there is no homophily. The values above 1 show presence of positive homophily (people are recruiting similar to themselves), values below 1 mean negative homophily (people are recruiting different from themselves). The value can be interpreted similar to an odds ratio. Homophily amongst FSW in Colombo is weak across all indicators, ranging between 1.04 and 1.68 (Table 8).

**Table 8: Homophily, FSW Colombo**

Indicator	Recruitment homophily	Estimated population homophily
HIV	1.00	1.27
Active syphilis	1.00	1.68
Used a condom at last sex with a client	1.00	1.07
Received free condoms from NGOs or a health care centre in the last 12 months and know where to obtain an HIV test	1.04	1.09
Correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	1.03	1.04
Tested for HIV in the past 12 months and knows result	1.02	1.05

### 8.1.5 Study and recruiter information

The primary reason for participation in the IBBS survey was for the HIV test (65.6%), followed by interest in HIV and sexual health (19.2%) and interest in issues related to FSW (12.6%) (Table 9). Nearly all respondents received the coupon from a friend/acquaintance (99.1%) who they had known for more than a year (66.0%), satisfying the properties of RDS. The screener was confident that all respondents were true FSW, with the exception of one participant.

Two FSW in their mid/late thirties who had travelled to the IBBS site in Colombo together said “We both received the coupon from the same friend. She told us to come for the interview because we could learn a lot of things by coming”. The two FSW also said that it was the first time they had an HIV test. “Nobody told us about this before”. One of them said that she wanted to know her status so that “I can keep my health good. Any suspicion that I had, was cleared by the test”.

**Table 9: Study and recruiter information, FSW Colombo**

Characteristic	Sample proportions	
	n/N	%
<b>Main reason for participation in the study</b>		
Interest in HIV and sexual health	116/605	19.2
HIV test	397/605	65.6
Interest in issues related to FSW	76/605	12.6
Helping the community	3/605	0.5
Friend wanted me to participate	11/605	1.8
Someone forced me	1/605	0.2
Incentive/Gift	1/605	0.2
<b>Mode of receiving the coupon<sup>4</sup></b>		
From a friend/acquaintance	594/599	99.1
Found it	4/599	0.7
Bought it/Exchanged it for something	0/599	-
Other	1/599 <sup>5</sup>	0.2
<b>Length of time they knew the person who gave them the coupon</b>		
< 6 months	45/594	7.6
6 months – 1 year	157/594	26.4
> 1 year	392/594	66.0
<b> Screener’s confidence that participant is FSW</b>		
Confident	603/605	99.7
Somewhat confident	1/605	0.2
Not confident	1/605	0.2

### 8.1.6 Biological test results

Overall prevalence of HIV and active syphilis amongst FSW in Colombo is 1.0% and 1.6%, respectively (Table 10). Lifetime prevalence of syphilis (e.g. ever having been infected); however, is much higher at 6.4%.

**Table 10: Biological test results, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
HIV	6/605	1.0	1.0	0.2 – 1.9
Syphilis – Active	7/605	1.2	1.6	0.4 – 2.8
Syphilis – Non-Active	28/605	4.6	4.8	2.8 – 6.8
Syphilis (active and non-active)	35/605	5.8	6.4	4.0 – 8.8

### 8.1.7 Socio-demographic characteristics

The average age of FSW in Colombo is 38.6 years, with most respondents (32.2%) over the age of 45 years (Table 11). Only one respondent reported their sex as ‘other’, the remainder identified as female, and reported the same sex at birth. All respondents were born in Sri Lanka and over three quarters (83.9%) are Sinhalese and speak Sinhalese at home (92.3%). Just over three quarters (84.1%) of FSW in Colombo made it to high school, but only a minority of respondents completed

<sup>4</sup> 6 seeds which are purposively selected by the IBBS team

<sup>5</sup> Other: Received it today (n=1)

high school, passing their ordinary level exams(13.5%). Nearly all FSW have resided in Colombo in the past year (99.2%). More than three quarters of FSW in Colombo have an income between 10,000 and 40,000 rupees per month (80.3%), and nearly all are supporting at least one other person/dependant (with the exception of only one FSW who is not supporting anyone else). Less than a quarter of FSW in Colombo have other income besides sex work (18.6%), with street worker/casual labourer (34.9%), factory worker (28.0%), and hairdresser (16.7%) being the most commonly reported occupations.

**Table11: Socio-demographic characteristics, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Age</b>				
Mean (years)	38.8	n/a	38.6	n/a
SD	11.5	-	11.7	-
Median	38.0	-	37.0	-
Range	18 – 72	-	-	-
<b>Age groups (years)</b>				
Aged under 20	17/605	2.8	4.2	1.6 – 6.9
Aged under 25	69/605	11.4	11.9	8.6 – 15.2
18 – 24	69/605	11.4	11.9	8.6 – 15.2
25 – 34	177/605	29.3	29.7	25.6 – 33.8
35 – 44	159/605	26.3	26.3	22.3 – 30.2
≥ 45	200/605	33.1	32.2	28.0 – 36.3
<b>Sex</b>				
Female	604/605	99.8	99.9	99.8 – 100
Other	1/605	0.2	0.01	0 – 0.2
<b>Sex same as at birth</b>				
Yes	605/605	100	100	-
<b>Citizenship</b>				
Sri Lankan	605/605	100	100	-
<b>Country of birth</b>				
Sri Lanka	605/605	100	100	-
<b>Ethnicity</b>				
Sinhalese	511/605	84.5	83.9	80.6 – 87.1
Sri Lankan Tamil	62/605	10.2	11.3	8.5 – 14.2
Indian Tamil	0/605	-	-	-
Moor	9/605	1.5	1.5	0.5 – 2.5
Burgher	1/605	0.2	0.06	0 – 0.1
Malay	1/605	0.2	0.1	0 – 0.3
Other (Muslim)	21/605	3.5	3.1	1.7 – 4.5
<b>District of residence during the past one year</b>				
Colombo	600/605	99.2	99.2	98.6 – 99.9
Other <sup>6</sup>	5/605	0.8	0.8	0.1 – 1.4

<sup>6</sup> Other: Gampaha (n=2), Kandy (n=1), Kurunegala (n=1), Polonnaruwa (n=1)

Table11: Socio-demographic characteristics, FSW Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Length of time lived in Colombo</b>				
< 1 year	0/604	-	-	-
≥ 1 year	604/604	100	100	-
<b>Primary residence</b>				
Colombo	449/605	74.2	75.7	72.0 – 79.5
Other	155/605	25.6	24.2	20.4 – 27.8
Don't know	1/605	0.2	0.1	0 – 0.3
<b>Language spoken at home</b> (multiple answers possible)				
Sinhalese	555/605	91.7	92.3	90.0 – 94.6
Tamil	50/605	8.3	8.1	5.7 – 10.4
English	0/605	-	-	-
Other (Muslim <sup>7</sup> )	12/605	2.0	1.6	0.7 – 2.5
<b>Literate</b>				
Yes	454/605	75.0	74.0	69.8 – 78.1
<b>Highest level of education</b>				
Never attended school	76/605	12.6	12.8	9.8 – 15.8
Grade 1-5	159/605	26.3	26.7	22.7 – 30.7
Grade 6-10	272/605	45.0	44.6	40.1 – 49.0
Passed O/L	83/605	13.7	13.5	10.6 – 16.5
Passed A/L	15/605	2.5	2.4	1.1 – 3.8
Completed Diploma	0/605	-	-	-
Completed Degree	0/605	-	-	-
<b>Currently a student</b>				
Yes	2/605	0.3	0.3	0 – 0.6
<b>Type of institution enrolled in</b> (among current students)				
University	1/2	50.0	46.7	-
Technical College	1/2	50.0	54.1	-
Vocational School	0/2	-	-	-
<b>Monthly personal income</b>				
< 5,000 Rupees	17/602	2.8	2.9	1.5 – 4.2
5,000-10,000	66/602	11.0	11.6	8.7 – 14.6
10,001-20,000	145/602	24.1	24.9	20.9 – 29.1
20,001-30,000	187/602	31.1	30.3	26.3 – 34.3
30,001-40,000	151/602	25.1	25.1	21.2 – 28.9
> 40,000	36/602	6.0	5.2	3.5 – 6.8

<sup>7</sup> While Muslim is not a language, but a race, these were the responses provided. It is possible that respondents meant Arabic.



Table11: Socio-demographic characteristics, FSW Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of people dependent on that income</b>				
Mean	3.3	-	3.2	-
SD	1.6	-	1.6	-
Median	3.0	-	3.0	-
Range	0 – 10	-	-	-
0	1/605	0.2	0.3	0 – 0.7
1	86/605	14.2	15.1	11.9 – 18.3
2	107/605	17.7	18.7	15.5 – 22.1
3	154/605	25.5	26.7	22.7 – 30.8
4	118/605	19.5	17.9	14.8 – 20.9
5 and more	139/605	23.0	21.3	18.0 – 24.5
<b>Has source/s of income other than sex work</b>				
Yes	109/605	18.0	18.6	15.2 – 22.0
<b>Occupation</b>				
Street vendor/casual labourer	42/109	38.5	34.9	25.5 – 43.8
Factory worker	28/109	25.7	28.0	17.1 – 39.1
Professional/banker/accountant	1/109	0.9	0.6	0.5 – 0.7
Teacher	1/109	0.9	1.9	1.5 – 2.4
Business owner	1/109	0.9	0.7	0.6 – 0.9
Hairdresser/beautician/masseuse	16/109	14.7	16.7	8.5 – 25.1
Waitress/bartender/hotel employee	1/109	0.9	0.7	0.6 – 0.9
Musician/dancer/performer	0/109	-	-	-
Tourism/travel agent/tour guide	1/109	0.9	0.7	0.6 – 0.9
Government worker	1/109	0.9	0.7	0 – 4.1
Security guard	1/109	0.9	1.2	0.9 – 1.4
Fisherman/seafarer	0/109	-	-	-
Farmer/agriculture worker	0/109	-	-	-
Taxi driver/Three wheeler driver	0/109	-	-	-
Other <sup>8</sup>	16/109	14.7	13.8	6.9 – 20.7

### FSW Colombo

Two FSW interviewed in Colombo mentioned that they both have children and families. Their families are not aware that they are sex workers. One of them said: “They don’t know that I am selling sex. I tell my family that I am visiting my married daughter”. The other FSW said she pretends to have another job. They are both afraid that their spouses and children will be upset once they find out that they sell sex. A third FSW in Colombo shared that her husband knows that she is a sex worker, but recently he wants her to stop. She still continues, for economic reasons, but now she hides the sex work from him. A fourth FSW, with a husband and four children, said that her husband does not mind her doing this work. Her husband used to be a police officer, but after an accident, he is now a three-wheeler driver. He helps to organize clients for his wife.

<sup>8</sup> Other: Cleaner (n=7), house maid (n=4), NGO (n=2), servant (n=1), machine operator (n=1), peer educator (n=1)

Most FSW in Colombo are currently married (68.4%) and live with their husbands (30.1%) and children (26.1%) (Table 12).

More than three quarters (86.1%) have children, ranging from one to thirteen, with most (33.6%) having two children.

**Table 12: Marital status, living arrangements, and children, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Marital status</b>				
Single (never married)	39/605	6.4	6.4	4.4 – 8.3
Living together but not married	3/605	0.5	0.9	0.2 – 1.6
Married	427/605	70.6	68.4	64.3 – 72.2
Divorced/Separated	91/605	15.0	16.4	13.1 – 19.7
Widowed	45/605	7.4	8.0	5.7 – 10.3
<b>Mode of living</b> (multiple answers possible)				
Alone	122/605	20.2	20.2	16.6 – 23.9
With husband	186/605	30.7	30.1	26.9 – 35.0
With other sexual partner	131/605	21.7	21.1	17.5 – 24.7
With parents	58/605	9.6	9.8	6.9 – 12.8
With siblings	13/605	2.1	1.9	0.9 – 2.7
With children	157/605	26.0	26.1	22.0 – 30.1
With other family/relatives	1/605	0.2	0.2	0 – 0.4
With friend/roommate (not sexual partner)	2/605	0.3	0.4	0 – 0.7
With co-workers	1/605	0.2	0.1	0 – 0.3
<b>Type of residence</b>				
Temporary shelter	92/605	15.2	13.9	10.8 – 16.9
Boarding house	228/605	37.7	38.9	34.7 – 43.2
Parents' home	53/605	8.8	9.2	6.9 – 11.5
Their own home	226/605	37.4	37.3	33.1 – 41.6
Lodging	0/605	-	-	-
On the street	3/605	0.5	0.4	0 – 0.9
Brothel	2/605	0.3	0.2	0 – 0.5
Other <sup>9</sup>	1/605	0.2	0.06	0 – 0.1
<b>Has children</b>				
Yes	527/605	87.1	86.1	82.7 – 89.3
<b>Number of children</b>				
1	147/527	27.9	28.6	24.2 – 33.1
2	178/527	33.8	33.6	29.3 – 37.8
3	131/527	24.9	25.2	20.9 – 29.5
4	44/527	8.3	8.7	6.0 – 11.4
5 or more	27/527	5.1	3.9	2.3 – 5.4

<sup>9</sup> Other: Illegal slums (n=1)

### 8.1.8 General sexual history

The average age of first vaginal sex is 18.8 years, although over half of FSW (57.6%) had first vaginal sex before or up to the age of 18 years, showing early sexual debut (Table13). Total number of sexual partners in the last seven days varied, around one third of respondents each had between one and three (32.0%), and four to seven (29.1%), and eight or more (33.1%) partners in the last week, and the same trend is seen for paying clients in the past seven days (one to three: 34.8%, four to seven: 31.3%, eight or more: 33.4%). The possibility of intergenerational sex was assessed, and in Colombo there was only one case, of a 12 year old girl indicating the age of her first partner was 65 (not shown in table).

**Table13: General sexual history, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Age at first vaginal sex (years)</b>				
Mean	18.6	-	18.8	-
SD	3.9	-	4.1	-
Median	18.0	-	18.0	-
Range	9 – 38	-	-	-
<b>Age groups at first vaginal sex</b>				
< 16	105/601	17.5	18.6	15.0 – 22.2
16 – 18	241/601	40.1	37.0	32.9 – 40.8
19 – 24	212/601	35.3	35.9	31.9 – 40.0
≥ 25	43/601	7.2	8.5	5.7 – 11.5
<b>Had anal sex</b>				
Yes	214/593	36.1	34.3	29.9 – 38.6
<b>Age at first anal sex (years)</b>				
Mean	21.9	-	22.0	-
SD	3.6	-	3.8	-
Median	20.0	-	20.0	-
Range	14 – 35	-	-	-
<b>Age groups at first anal sex (years)</b>				
< 16	1/199	0.2	0.4	0.3 – 0.5
16 – 18	12/199	6.0	8.2	2.2 – 14.5
19 – 24	145/199	72.9	69.0	60.8 – 76.7
≥ 25	41/199	20.6	22.4	15.0 – 29.9
<b>Age of partner at first sex (vaginal or anal) (years)</b>				
Mean	24.2	-	24.3	-
SD	5.1	-	5.2	-
Median	24.0	-	25.0	-
Range	16 – 65	-	-	-
<b>Age groups of partner at first sex (vaginal or anal) (years)</b>				
< 16	0/577	-	-	-
16 – 18	52/577	9.0	9.1	6.7 – 11.5
19 – 24	249/577	43.2	40.1	35.6 – 44.3
≥ 25	276/577	47.8	50.8	46.5 – 55.4

Table13: General sexual history, FSW Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of <u>all</u> sexual partners in the last 7 days</b>				
Mean	6.7	-	6.3	-
SD	5.4	-	5.3	-
Median	5.0	-	5.0	-
Range	0 - 35	-	-	-
0	29/605	4.8	5.8	3.3 - 8.3
1-3	178/605	29.4	32.0	27.6 - 36.7
4-7	179/605	29.6	29.1	25.2 - 33.0
8-10	116/605	19.2	18.1	14.8 - 21.3
11 or more	103/605	17.0	15.0	12.1 - 17.8
<b>Number of paying sexual partners (clients) in the last 7 days</b>				
Mean	6.7	-	6.4	-
SD	5.2	-	5.1	-
Median	5.0	-	5.0	-
Range	0 - 35	-	-	-
0	4/576	0.7	0.6	0 - 1.1
1-3	183/576	31.8	34.8	30.3 - 39.7
4-7	181/576	31.4	31.3	27.2 - 35.4
8-10	114/576	19.8	19.1	15.6 - 22.4
11 or more	94/576	16.3	14.3	11.3 - 17.1
<b>Number of <u>regular</u> (non-paying) sexual partners in the last 7 days</b>				
Mean	0.3	-	0.3	-
SD	0.9	-	0.9	-
Median	0	-	0	-
Range	0 - 15	-	-	-
0	451/576	78.3	79.8	76.4 - 83.5
1	92/576	16.0	14.7	11.5 - 17.7
2 or more	33/576	5.7	5.5	3.7 - 7.3
<b>Number of <u>all</u> sexual partners in the last 30 days</b>				
Mean	26.8	-	25.6	-
SD	19.8	-	19.3	-
Median	25.0	-	21.0	-
Range	0 - 100	-	-	-
0	8/605	1.3	1.3	0.3 - 2.3
1-10	129/605	21.3	23.2	19.4 - 27.2
11-20	151/605	25.0	25.2	21.6 - 28.9
21-30	158/605	26.1	26.7	22.6 - 30.8
31 or more	159/605	26.3	23.6	19.6 - 27.4

Table13: General sexual history, FSW Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for not having sex in the last 30 days</b> (among those who reported 0 partners) (multiple answers possible)				
Have not found any clients <sup>10</sup>	7/8	87.5	95.3	86.6 – 100
Other	5/8	62.5	55.1	16.9 – 91.4
<b>Number of paying sexual partners (clients) in the last 30 days</b>				
Mean	26.5	-	25.4	-
SD	19.5	-	19.0	-
Median	23.0	-	21.0	-
Range	0 – 100	-	-	-
0	4/597	0.7	0.6	0 – 1.1
1-10	125/597	20.9	23.0	19.3 – 26.8
11-20	156/597	26.1	26.3	22.6 – 30.0
21-30	153/597	25.6	26.2	22.1 – 30.4
31 or more	159/597	26.6	24.0	20.0 – 27.6
<b>Number of regular (non-paying) sexual partners in the last 30 days</b>				
Mean	0.6	-	0.6	-
SD	1.2	-	1.2	-
Median	0	-	0	-
Range	0 – 5	-	-	-
0	420/597	70.4	73.2	69.9 – 76.8
1	61/597	10.2	8.9	6.7 – 11.0
2	71/597	11.9	10.8	8.3 – 13.1
3 or more	45/597	7.5	7.1	5.1 – 9.1

### 8.1.9 Sexual history with paying partners (clients)

The average age of first paid sex is 24.3 years with the primary reason being the need for money (89.8%) and not having another job (44.0%), (Table 14). A 55 year old FSW in Colombo said that she started with selling sex six years ago. Her husband mistreated her, and then left her for another wife. Her daughter lost her husband, and she took care of her daughter and her three children. While she is working 7 days a week as a cleaner, she also started selling sex three to four evenings in a week in order to be able to support her family. A 37 year old FSW said to have started sex work 20 years ago. At that time, she helped a man with selling vegetables. When doing so, men approached her, and she accepted. She still sees four to five clients regularly. These clients phone her, and they then agree on a meeting venue such as a particular house or a room somewhere. Of two FSW between 35 – 40 years of age interviewed together, one was very vocal about never having sex without a condom with clients “No way”. The other FSW indicated to sometimes do it if clients pay extra. “I am very scared to have sex without a condom, but I do it”.

<sup>10</sup> Other: In prison (n=1), pregnant (n=1), sick (n=1), four times during last 12 months (n=1), stopped exchanging sex money two months ago (n=1)

On average, FSW have 2.1 clients a day and are paid 1,276 rupees for sex. Vaginal sex (93.0%), followed by oral sex (43.9%) are the most common sex acts exchanged for money. The most common places for meeting clients are street, park or public transport (50.4%) and massage parlour/ spa / salon (21.2%). Similarly, hotels are the most common place where sex is engaged (57.2%), followed by massage parlours (21.3%). Most FSW in Colombo used a condom at last sex with client (94.0%), and it was predominantly suggested by the FSW themselves (98.5%). The most common reasons for using a condom include preventing HIV and STIs (84.0%) and not trusting the partner (55.4%), while reasons for not using a condom include objection by partner (39.0%), not thinking it was necessary (25.5%) and never heard of condoms (18.7%). Nearly a quarter of FSW (23.5%) in Colombo have had sex with a client without a condom because they paid extra money. Almost all clients are typically Sri Lankan (one exception, one Korean client), and over three quarters (80.0%) believe their last client's HIV status to be negative. The four respondents who believed their last client's status to be positive, used a condom at last sex. Furthermore, of the six HIV positive FSW in Colombo, five used a condom at last sex with a paying partner.

**Table 14: Sexual history with paying partners, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Age at first experience of selling sex</b>				
Mean	24.2	-	24.3	-
SD	5.9	-	5.8	-
Median	23.0	-	23.0	-
Range	14 – 55	-	-	-
<b>Age groups at first experience of selling sex</b>				
< 16	5/595	0.8	0.8	0.3 – 1.2
16 – 18	61/595	10.3	11.4	8.2 – 14.5
19 – 24	270/595	45.4	42.5	38.3 – 45.6
≥ 25	259/595	43.5	45.3	41.1 – 49.8
<b>Reasons for first experience of selling sex</b> (multiple answers possible)				
Need money	539/605	89.1	89.8	87.0 – 92.8
Didn't have other job	255/605	42.1	44.0	40.0 – 48.4
Grew up around people who did sex work	33/605	5.5	4.8	2.9 – 6.7
Forced/Pressured into it	12/605	2.0	1.5	0.6 – 2.4
I like it/For pleasure Encouraged by friends/people I know	12/605	2.0	1.8	0.8 – 2.8
It pays well	15/605	2.5	1.8	0.8 – 2.7
Abandoned by parents/siblings	27/605	4.5	4.2	2.5 – 6.0
Abandoned by husband	20/605	3.3	3.0	1.4 – 4.5
Extra money	156/605	25.8	24.2	20.5 – 27.9
Orphan	9/605	1.5	1.1	0.4 – 1.9
Other <sup>11</sup>	16/605	2.6	2.5	1.2 – 3.8

<sup>11</sup> Other: Had a baby (n=1), to buy drugs (n=1)

Table 14: Sexual history with paying partners, FSW Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Condom use during last 30 days</b>				
Every time	494/593	83.3	83.5	80.3 – 86.6
Almost every time	66/593	11.1	11.1	8.3 – 13.8
Sometimes	19/593	3.2	2.8	1.5 – 4.1
Never	12/593	2.0	2.4	1.0 – 3.8
Don't know	2/593	0.3	0.3	0 – 0.7
<b>Had sex only <u>one time</u> with a majority of clients in the last 12 months</b>				
Yes, has sex only one time with most clients	338/602	56.1	55.8	51.5 – 60.1
No, has sex more than one time with most clients	262/602	43.5	43.9	39.6 – 48.2
Don't know	2/602	0.3	0.3	0 – 0.6
<b>Number of clients on the last day they sold sex</b>				
Mean	2.17	-	2.1	-
SD	1.1	-	1.0	-
Median	2.0	-	2.0	-
Range	1 – 6	-	-	-
1	169/603	28.0	30.0	26.0 – 34.2
2	256/603	42.5	42.8	38.7 – 47.0
3 or more	178/603	29.5	27.2	23.4 – 30.7
<b>Amount of money typically received for sex</b>				
Mean	1288.0	-	1275.6	-
SD	594.4	-	575.9	-
Median	1250.0	-	1000.0	-
Range	200 – 5000	-	-	-
≤ 1000 Rupees	300/600	50.0	50.4	45.9 – 54.9
> 1000 Rupees	300/600	50.0	49.6	45.1 – 54.1
<b>Type of sex last exchanged for that amount of money</b> (multiple answers possible)				
Oral sex	258/602	42.9	43.9	39.4 – 48.5
Vaginal sex	564/602	93.7	93.0	90.3 – 95.7
Anal sex	131/602	21.8	21.3	17.4 – 25.1
Short term (hours or less) companionship	137/602	22.8	22.8	18.9 – 81.1
Long term (i.e.: night/weekend) companionship	9/602	1.5	1.3	0.5 – 2.1

Table 14: Sexual history with paying partners, FSW Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Person who decides how much the client pays</b>				
Pimp/Tout	75/602	12.5	13.4	10.6 – 16.2
Owner of the brothel	58/602	9.6	10.5	7.6 – 13.5
Woman decides	456/602	75.7	74.2	70.3 – 77.9
The client decides	13/602	2.2	2.0	0.8 – 3.1
<b>Places where they normally find clients</b>				
(multiple answers possible)				
Brothel	51/605	8.4	8.0	5.5 – 10.4
Bar/café/disco/restaurant/night club	4/605	0.7	0.6	0.04 – 1.2
Hotel	30/605	5.0	4.3	2.5 – 6.1
Street, park, or public transport	301/605	49.8	50.4	46.0 – 55.0
Through friends	9/605	1.5	1.7	0.2 – 3.2
Internet, chat, or SMS	10/605	1.7	1.5	0.4 – 2.5
Motel or guest house	10/605	1.7	1.6	0.5 – 2.7
School	1/605	0.2	0.1	0 – 0.4
Party	0/605	-	-	-
Service station	0/605	-	-	-
Intermediary (pimp, bartender, taxi driver)	50/605	8.3	9.2	6.4 – 12.0
Truck stop / three wheeler stop	5/605	0.8	0.8	0.02 – 1.5
Massage parlour/Spa/Salon	131/605	21.7	21.2	16.9 – 25.4
Other <sup>12</sup>	2/605	0.3	0.6	0 – 1.2
Don't know	1/605	0.2	0.06	0 – 0.2
<b>Places where they normally have sex with clients</b>				
Brothel	59/603	9.8	9.2	6.7 – 11.7
Hotel/Guest house	339/603	56.2	57.2	52.0 – 62.4
Massage parlour	132/603	21.9	21.3	17.2 – 25.4
Their own home	77/603	12.8	13.5	10.3 – 16.8
Client's home	29/603	4.8	4.4	2.7 – 6.2
Car	23/603	3.8	3.1	1.8 – 4.5
Park	9/603	1.5	1.2	0.4 – 1.9
<b>Used a condom at last sex with a client</b>				
Yes	567/604	93.9	94.0	92.0 – 96.0
<b>Person who suggested to use a condom</b>				
Woman did	557/566	98.4	98.5	97.4 – 99.5
Client did	9/566	1.6	1.5	0.4 – 2.6

<sup>12</sup> Other: My home (n=1), Pettah road (n=1)



Table 14: Sexual history with paying partners, FSW Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for using a condom</b> (multiple answers possible)				
To prevent HIV/STIs	474/567	83.6	84.0	80.5 – 87.6
Do not trust partner	320/567	56.4	55.4	50.2 – 60.6
Messages advising use of condoms	31/567	5.5	6.2	3.9 – 8.5
To prevent pregnancy	79/567	13.9	13.0	9.8 – 16.0
<b>Reasons for not using a condom</b> (multiple answers possible)				
Never heard of condoms	7/37	18.9	18.7	6.4 – 31.1
Don't know how to obtain condoms	3/37	8.1	8.7	0 – 17.7
Didn't think it was necessary	10/37	27.0	25.5	11.8 – 39.2
Didn't think of it	5/37	13.5	9.9	1.3 – 18.2
Not available	2/37	5.4	9.6	0 – 21.1
Too expensive	0/37	0	0	-
Partner objected	12/37	32.4	39.0	23.4 – 55.0
Don't like them	1/37	2.7	1.9	0 – 5.1
Used other contraceptive	0/37	0	0	-
Used other prevention method	0/37	0	0	-
Partner was a faithful client	2/37	5.4	6.2	0 – 14.5
Partner was a regular client	0/37	0	0	-
Condoms take away pleasure	0/37	0	0	-
<b>Ever had intercourse with a client without a condom, because the client paid extra money</b>				
Yes	152/602	25.2	23.5	19.7 – 27.2
<b>Nationality of last client</b>				
Sri Lankan	603/604	99.8	99.9	99.8 – 100
Other <sup>13</sup>	1/604	0.2	0.1	0 – 0.2
<b>Last client's HIV status</b>				
Negative	477/605	78.8	80.0	76.3 – 83.7
Positive	4/605	0.7	0.4	0.07 – 0.8
Don't know	124/605	20.5	19.6	15.8 – 23.3

### 8.1.10 Sexual history with non-paying (regular) partners

Interestingly, almost as many FSW used a condom at last sex with a non-paying partner (90.4%), as with their last client (93.8% - presented previously) (Table 15). However, noteworthy is that only a small proportion had ever had a regular partner (227/605 FSW in Colombo never had a non-paying partner in their life).

<sup>13</sup> Other: Korean

**Table 15: Sexual history with non-paying partners, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Condom use during last 30 days</b>				
Every time	112/173	64.7	66.8	59.8 – 74.0
Almost every time	35/173	20.2	17.6	11.7 – 23.4
Sometimes	20/173	11.6	11.2	8.5 – 13.9
Never	6/173	3.5	4.2	1.1 – 7.5
<b>Used a condom at last sex</b>				
Yes	337/375	89.9	90.4	87.5 – 93.4
<b>Person who suggested to use a condom</b>				
Woman did	333/337	98.8	98.4	96.8 – 100
Partner did	4/337	1.2	1.6	0 – 3.2
<b>Reasons for using a condom</b> (multiple answers possible)				
To prevent HIV/STIs	270/337	80.1	81.2	76.7 – 85.8
Do not trust partner	160/337	47.5	45.4	38.7 – 51.9
Messages advising use of condoms	1/337	0.3	0.4	0 – 1.1
To prevent pregnancy	56/337	16.6	14.9	10.1 – 19.2
<b>Reasons for <u>not</u> using a condom</b> (multiple answers possible)				
Never heard of condoms	1/38	2.6	2.8	0 – 7.4
Don't know how to obtain condoms	0/38	-	-	-
Didn't think it was necessary	8/38	21.1	18.1	6.8 – 28.7
Didn't think of it	3/38	7.9	5.1	0 – 10.4
Not available	1/38	2.6	3.8	0 – 10.6
Too expensive	0/38	-	-	-
Partner objected	13/38	34.2	36.1	20.0 – 52.2
Don't like them	1/38	2.6	2.4	0 – 6.6
Used other contraceptive	1/38	2.6	1.1	0 – 2.9
Used other prevention method	0/38	-	-	-
Faithful partner	14/38	36.8	38.9	23.9 – 53.7
Regular partner	4/38	10.5	10.0	1.1 – 19.0
Condoms take away pleasure	0/38	-	-	-
Don't know	1/38	2.6	2.4	0 – 6.6

### 8.1.11 Male condom availability and use

Almost all FSW in Colombo have heard of a male condom (99.2%), ever used one, (97.7%), and know where to obtain one (98.5%) (Table 16). A private pharmacy or chemist is the most common place noted for obtaining male condoms (87.9%), followed by the Government STD clinic (26.9%), the same trend is noted for FSW main sources of condoms, at 86.8% and 24.2%, respectively. Over three quarters (79.0%) of FSW carry condoms with them, but only just over a third (35.8%) have received free condoms from an NGO or health centres in the last 12 months. Most FSW find condoms to be affordable (96.0%) and easy to obtain (91.7%).

**Table 16: Male condom availability and use, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of a male condom</b>				
Yes	599/605 <sup>14</sup>	99.0	99.2	98.6 – 99.8
<b>Ever used a male condom</b>				
Yes	582/599	97.2	97.7	96.6 – 98.8
<b>Knows where to obtain male condoms</b>				
Yes	590/599	98.5	98.5	97.5 – 99.5
<b>Places where they can obtain male condoms</b> (multiple answers possible)				
Government STD clinic	160/590	27.1	26.9	22.8 – 31.1
Government non-STD clinic	11/590	1.9	1.4	0.6 – 2.2
Private clinic	7/590	1.2	1.0	0.3 – 1.6
Private pharmacy or chemist	520/590	88.1	87.9	84.9 – 90.8
Traditional healer/Herbalist	4/590	0.7	0.8	0 – 1.7
Neighbourhood market/Stand	10/590	1.7	1.4	0.5 – 2.2
Friends	13/590	2.2	2.0	0.7 – 3.3
Sex partner/s	8/590	1.4	1.5	0.2 – 2.8
Bar	1/590	0.2	0.3	0 – 0.7
Service Station/s	30/590	5.1	4.3	2.7 – 6.0
NGO	6/590	1.0	1.2	0.2 – 2.2
Hotel	1/290	0.2	0.2	0 – 0.5
<b>Main source/s of condoms</b> (multiple answers possible)				
Government STD clinic	148/599	24.7	24.2	20.3 – 28.1
Government non-STD clinic	10/599	1.7	1.2	0.5 – 1.9
Private clinic	3/599	0.5	0.4	0 – 0.8
Private pharmacy or chemist	528/599	88.1	86.8	83.7 – 89.8
Traditional healer/Herbalist	0/599	0	0	-
Neighbourhood market/Stand	8/599	1.3	1.1	0.3 – 1.8
Friends	24/599	4.0	4.0	2.1 – 5.8
Sex partner/s	7/599	1.2	1.3	0 – 2.5
Bar	1/599	0.2	0.1	0 – 0.3
Service Station/s	44/599	7.3	6.8	4.7 – 8.7
NGO	8/599	1.3	1.5	0.4 – 2.5
Hotel	1/599	0.3	0.5	0 – 1.0
Don't buy condoms	2/599	0.2	0.1	0 – 0.3
Don't know	5/599	0.8	0.8	0.08 – 1.5
<b>Usually carries condoms</b>				
Yes	476/599	79.5	79.0	75.3 – 82.6
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>				
Yes	231/599	38.6	35.8	31.3 – 40.0

<sup>14</sup> Slight discrepancy with 'reasons for not using condoms' where n=7 had never heard of a condom, and in this question n=6 had never heard of a condom – could be a result of the question ordering, at the time of this question, the respondent had now heard of a condom.

Table 16: Male condom availability and use, FSW Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Person who usually provides condoms</b>				
Never uses a condom	5/598	0.8	0.7	0.1 – 1.2
Woman does	542/598	90.6	90.2	97.5 – 92.8
Client does	14/598	2.3	2.4	1.1 – 3.8
Owner / Manager of the place	35/598	5.9	6.4	4.1 – 8.8
Don't know	2/598	0.3	0.3	0 – 0.6
<b>Condom is affordable</b>				
Very affordable	511/598	85.5	85.7	82.5 – 89.0
Somewhat affordable	59/598	9.9	10.3	7.5 – 13.2
Not affordable	16/598	2.7	1.7	0.8 – 2.3
Don't know	12/598	2.0	2.3	0.9 – 3.7
<b>Condom is easy to obtain</b>				
Very easy	434/599	72.5	73.1	69.2 – 77.1
Somewhat easy	109/599	18.2	18.6	15.1 – 22.2
Not easy	41/599	6.8	5.7	3.8 – 7.6
Don't know	15/599	2.5	2.6	1.2 – 3.9

### 8.1.12 Female condom availability and use

Only a third of FSW (32.7%) in Colombo have ever heard of female condoms, but of those who have heard of them almost a third have used them (32.1%) (Table 17). Over a third (39.0%) of FSW would consider using female condoms in the future, but more importantly more than half (59.9%) would not consider using them in the future.

Table 17: Female condom availability and use, FSW Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of a female condom</b>				
Yes	204/605	33.7	32.7	28.1 – 37.0
<b>Ever used a female condom</b>				
Yes	67/204	32.8	32.1	24.3 – 39.6
<b>Would consider using a female condom in the future</b>				
Yes	83/203	40.9	39.0	31.7 – 46.1
No	119/203	58.6	59.9	52.9 – 67.1
Don't know	1/203	0.5	1.1	0 – 3.5

#### FSW Colombo

Two FSW explained that they obtain condoms through a peer educator. “One person in our network is in contact with a service organization, and through that person we get condoms. The person calls her contact and then we all meet. Each time we get around 30 condoms. We usually meet once a month. The clients never bring condoms”. The same women also said: “We heard about the need to use condoms before from the contact person and through the television. But today, here at the IBBS site, we heard it from a professional. We are now more convinced that it is important to use a condom”.

### 8.1.13 Lubricant availability and use

Few (14.6%) FSW in Colombo had heard of lubricant, and among them, over half 50.3% would be interested in using it in the future (Table 18). The most common lubricant used is Vaseline (61.3%) and baby oil (44.2%).

**Table 18: Lubricant availability and use, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of lubricant</b>				
Yes	99/603	16.4	14.6	11.7 – 17.3
<b>Lubricant use during vaginal or anal sex</b>				
Always	7/99	7.1	5.9	1.6 – 10.0
Usually	20/99	20.2	17.9	11.3 – 24.7
Sometimes	27/99	27.3	29.1	19.9 – 58.6
Rarely	8/99	8.1	7.7	2.0 – 13.3
Never	37/99	37.4	39.4	28.9 – 49.8
<b>Type of lubricant used</b> (multiple answers possible)				
Glycerine	3/62	4.8	4.3	0 – 8.6
Saliva/Water	11/62	17.7	15.0	6.7 – 22.8
Vaseline	36/62	58.1	61.3	49.1 – 73.9
Baby Oil	28/62	45.2	44.2	31.3 – 56.9
Lotion	19/62	30.6	32.8	21.0 – 44.7
Other Oil	1/62	1.6	1.6	0 – 4.9
Water-Based	5/62	8.1	8.8	1.9 – 15.8
Silicone-Based	2/62	3.2	3.3	0 – 7.4
Soap	0/62	-	-	-
What I get from peer educator	0/62	-	-	-
Don't know	2/62	3.2	2.3	0 – 5.2
<b>Interested in using lubricant in the future</b>				
Yes	52/99	52.5	50.3	40.1 – 60.4
No	46/99	46.5	48.7	38.7 – 58.9
Don't know	1/99	1.0	0.9	0 – 2.6

### 8.1.14 Knowledge of STI symptoms in women and men

More than three quarters of FSW (78.0%) in Colombo have heard of diseases that can be transmitted sexually, but only a quarter (25.3%) knew that it is possible to have an STI without symptoms (Table 19).

**Table 19: Knowledge of STI symptoms in women and men, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of diseases that can be transmitted sexually</b>				
Yes	477/605	78.8	78.0	74.2 – 81.7
<b>Knows it is possible to have an STI without symptoms</b>				
Yes	171/605	28.3	25.3	21.4 – 28.9

Table 19: Knowledge of STI symptoms in women and men, FSW Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Mentioned as a sign/symptom of STIs in women</b> (multiple answers possible)				
Abdominal pain	31/476	6.5	6.5	4.2 – 8.7
Genital discharge	141/476	29.6	28.9	24.7 – 33.0
Foul smelling discharge	45/476	9.5	8.6	6.0 – 11.2
Burning pain on urination	157/476	33.0	30.6	26.0 – 34.9
Genital ulcers or sores	73/476	15.3	15.1	11.3 – 18.7
Swelling in groin area	127/476	26.7	24.0	19.9 – 27.9
Itching	281/476	59.0	55.6	50.5 – 60.3
<b>Does not know any symptoms of STIs in women</b> (among those who have heard of STIs)				
Yes	96/476	20.2	22.3	18.0 – 26.7
<b>Mentioned as a sign/symptom of STIs in men</b> (multiple answers possible)				
Abdominal pain	13/477	2.7	2.8	1.1 – 4.4
Genital discharge	92/477	19.3	19.9	16.7 – 23.7
Foul smelling discharge	25/477	5.2	4.9	2.8 – 6.9
Burning pain on urination	104/477	21.8	19.0	15.5 – 22.4
Genital ulcers or sores	48/477	10.1	9.3	6.6 – 11.7
Swelling in groin area	91/477	19.1	17.1	13.5 – 20.4
Itching	210/477	44.0	41.9	36.7 – 46.9
<b>Does not know any symptoms of STIs in men</b> (among those who have heard of STIs)				
Yes	187/477	39.2	40.7	35.8 – 45.8
<b>Places where someone from the community who has an STI can get treatment</b> (multiple answers possible)				
Ayurvedic physician	1/605	0.2	0.5	0 – 1.3
Pharmacy	3/605	0.5	0.4	0 – 0.8
Private clinic	25/605	4.1	3.8	2.2 – 5.3
Government STD clinic	400/605	66.1	64.6	60.3 – 68.9
Government clinic or hospital (non-STD)	69/605	11.4	11.7	8.8 – 14.5
Don't know	130/605	21.5	22.4	18.8 – 26.1

### 8.1.15 Patterns of STI care seeking

Less than ten percent of FSW in Colombo have had an STI diagnosed by a doctor (3.5%), self reported discharge (2.1%) or an ulcer/sore (0.4%) in the last 12 months. Among those who experienced discharge or ulcer/sore in the last 12 months, nearly three quarters (73.4%) sought treatment for discharge, and all sought treatment for sore/ulcer (Table 20).

A FSW of 52 years of age mentioned that FSW are scared to go to the STI clinic. She mentioned two reasons for this, first they fear to be ridiculed by the medical staff, especially the nurses; but second they are also afraid that somebody they know might recognize them. Other FSW mentioned that they had positive experiences with the STI clinic, but that they were not going very often. Some ask fellow FSW to accompany them when visiting the clinic.

**Table 20: Patterns of STI care seeking, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Doctor confirmed STI in the last 12 months</b>				
Yes	18/477	3.8	3.5	1.9 – 5.0
<b>STI symptoms (discharge) in the last 12 months</b>				
Yes	13/605	2.1	2.1	0.9 – 3.2
<b>Sought treatment for discharge</b>				
Yes	10/13	76.9	73.4	43.5 - 100
<b>Reasons for not seeking treatment for discharge</b> (multiple answers possible)				
Didn't know where to go	2/3	66.7	89.8	51.7 – 100
Embarrassed or afraid	1/3	33.3	10.6	0 – 49.8
Could not afford treatment	0/3	-	-	-
Unable to get transportation	0/3	-	-	-
Didn't think I needed it	0/3	-	-	-
<b>STI symptoms (sore or ulcer) in the last 12 months</b>				
Yes	3/605	0.5	0.4	0 – 0.8
<b>Sought treatment for sore or ulcer</b>				
Yes	3/3	100	100	-
<b>Places where STI treatment (for discharge, sore, or ulcer) was sought</b> (multiple answers possible)				
Government STD clinic	5/11	45.5	37.1	9.7 – 64.0
Government non-STD clinic	0/11	0	0	-
Private clinic	0/11	0	0	-
Private pharmacy or chemist	6/11	54.5	63.0	35.7 – 90.6
Traditional healer/Herbalist	0/11	-	-	-
Medicine or herbs from home	0/11	-	-	-
Don't know	0/11	-	-	-
<b>Reasons for choosing this/these places</b> (multiple answers possible)				
Confidentiality	7/11	63.6	65.9	39.0 – 92.9
Affordability	1/11	9.1	8.3	0 – 23.6
Recommendation by friend or acquaintance	5/11	45.5	42.3	13.7 – 70.8
Quality and/or specialized care given at this place	0/11	-	-	-
Knows the caregivers	0/11	-	-	-
Known friendliness of the caregivers	1/11	9.1	8.4	0 – 23.7
Proximity/Location	0/11	-	-	-

Table 20: Patterns of STI care seeking, FSW Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Told health care provider that they exchange sex for money last time they received STI treatment or diagnosis</b>				
Yes	15/23	65.2	66.4	47.2 – 86.2
<b>Satisfaction with treatment from health care provider during last visit for STI treatment</b>				
Very satisfied	17/23	73.9	72.4	53.4 – 90.9
Somewhat satisfied	4/23	17.4	20.6	3.0 – 38.7
Not satisfied	2/23	8.7	7.0	0 – 16.0

### 8.1.16 HIV information and personal risk perception

More than three quarters of FSW (77.0%) have heard of HIV and AIDS, with the main sources of information coming from health services (38.7%) and NGOs (29.6%) (Table 21). Also, more than half of FSW (57.7%) have never discussed HIV and AIDS with any sexual partner. One third of FSW in Colombo believe they are either at small risk (34.4%) or high risk (33.2%) for HIV, with the main reason being multiple partners (82.3%). The FSW who believe they are at no risk for HIV (15.4%) state condom usage (93.1%) as the primary reason, followed by trusting their partner (13.3%). Of the 208 FSW who indicated they believe they are at 'high risk' for HIV, 198 of these used a condom at last sex with a paying partner (data not shown in table); however as the majority of women used a condom at last sex with a client, this data is not particularly noteworthy.<sup>15</sup>

#### FSW Colombo

A FSW in her late thirties said: “When I came here (at the IBBS site), I had a doubt whether I was carrying HIV. After the test, I am convinced now that I am okay. I was a bit suspicious before.”

Table 21: HIV information and personal risk perception, FSW Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of HIV/AIDS</b>				
Yes	474/605	78.3	77.0	72.6 – 81.1
<b>Main source of the most thorough information about HIV/AIDS</b>				
School	11/474	2.3	2.5	0.7 – 4.3
Health services	174/474	36.7	38.7	34.2 – 43.5
Workplace	18/474	3.8	4.1	2.0 – 6.3
Friends/Family	25/474	5.3	6.1	3.4 – 8.9
Television	42/474	8.9	9.4	6.5 – 12.4
Newspaper/Magazines	27/474	5.7	6.0	3.8 – 8.2
Posters/Billboards	8/474	1.7	1.5	0.6 – 2.5
Pamphlets/Leaflets	6/474	1.3	1.1	0.3 – 2.0
Radio	1/474	0.2	0.2	0 – 0.5
NGOs	161/474	34.0	29.6	25.0 – 33.8
Other <sup>16</sup>	1/474	0.2	0.1	0 – 0.4

<sup>15</sup> Note that discrepancy shown in denominator is due to missing data in the question condom use with last client

<sup>16</sup> Other: Jail (n=1)



Table 21: HIV information and personal risk perception, FSW Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Discussed HIV/AIDS with any sexual partner</b>				
Yes, all	25/474	5.3	5.4	3.0 – 7.8
Yes, some	185/474	39.0	36.6	31.5 – 41.4
No, none	262/474	55.3	57.7	52.9 – 62.7
Don't know	2/474	0.4	0.3	0 – 0.7
<b>Sexual partner/s told them their HIV status</b>				
Yes, all	12/210	5.7	6.7	2.7 – 10.8
Yes, some	175/210	83.3	80.0	72.9 – 86.5
No, none	23/210	11.0	13.3	7.7 – 19.3
<b>Knows somebody who is HIV-positive or has died of AIDS</b>				
Yes	89/474	18.8	17.6	13.7 – 21.4
<b>Close friend or relative died of HIV/AIDS</b>				
Yes, close relative	7/89	7.9	9.7	1.0 – 18.7
Yes, close friend	21/89	23.6	24.7	15.3 – 34.1
<b>Perception of personal HIV risk</b>				
No risk	75/604	12.4	15.4	12.1 – 19.0
Small risk	208/604	34.4	34.4	30.3 – 38.5
Moderate risk	87/604	14.4	12.9	10.0 – 15.7
High risk	209/604	36.4	33.2	29.1 – 37.3
Don't know	25/604	4.1	4.0	2.3 – 5.8
<b>Reasons for believing they are at risk of contracting HIV</b> (among those who said they were at risk)				
Many sexual partners	410/503 <sup>18</sup>	81.5	82.3	78.5 – 86.1
Didn't always use condoms	37/503	7.4	5.9	4.0 – 7.7
Injected drugs	1/503	0.2	0.1	0 – 0.3
Partner has other partners	53/503	10.5	10.8	7.3 – 14.2
Other <sup>17</sup>	2/503	0.4	0.9	0 – 1.9
<b>Reasons for believing they are not at risk of contracting HIV</b> (among those who said they were not at risk) (multiple answers possible)				
Trust my partner/s	11/75	14.7	13.3	6.0 – 20.4
Always use condoms	69/75	92.0	93.1	87.8 – 98.6
Don't know	2/75	2.7	2.3	0 – 5.3
Other <sup>19</sup>	1/75	1.3	1.8	0 – 5.0

<sup>17</sup> Other: HIV positive (n=1), condoms sometimes tear (n=1).

<sup>18</sup> One person refused to answer, hence N=503

<sup>19</sup> Other: Uses condoms most of the time

### 8.1.17 Knowledge of HIV and AIDS

FSW in Colombo overall have moderate levels of knowledge around individual HIV indicators (Table 22). While more than three quarters of respondents know that having sex with only one uninfected partner can reduce their risk (80.0%), that a person can reduce the risk of transmission by using condoms (89.1%), and that one cannot get HIV from sharing food with an infected person (76.4%), a fewer percentage know that a healthy looking person can have HIV (67.3%) and that mosquito cannot transmit HIV (70.4%). Overall, less than a third of FSW in Colombo correctly identify ways of preventing sexual transmission of HIV and reject major misconceptions about HIV transmission.

**Table 22: Knowledge of HIV and AIDS, Colombo FSW**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners</b>				
Yes	488/605	80.7	80.0	75.9 – 84.0
<b>Person can reduce the risk of getting HIV by using a condom every time he/she has sex</b>				
Yes	537/605	88.8	89.1	86.5 – 91.8
<b>Healthy-looking person can have HIV</b>				
Yes	423/605	69.9	67.3	62.9 – 71.2
<b>Person can get HIV from mosquito bites</b>				
No	419/605	69.3	70.4	66.7 – 74.4
<b>Person can get HIV by sharing food with someone who is infected</b>				
No	455/604	75.3	76.4	72.8 – 80.1
<b>Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission</b>				
Yes	195/604	32.3	31.3	27.3 – 35.3
<b>GARP Knowledge Composite Indicator without GARP4 (mosquito question)</b>				
Yes	254/604	42.1	40.2	35.4 – 44.7
<b>HIV can be transmitted from mother to her unborn child</b>				
Yes	367/605	60.7	59.0	54.5 – 62.3
No	164/605	27.1	28.2	24.2 – 32.4
Don't know	74/605	12.2	12.8	9.6 – 16.0
<b>Ever heard of ART</b>				
Yes	176/605	29.1	29.6	25.8 – 33.4

### 8.1.18 Stigma related to HIV and AIDS

Stigma is present amongst FSW in Colombo, with only just over two thirds (66.3%) of FSW willing to take care of an HIV positive members and less than half (47.2%) agreeing that a student should be able to go to school if HIV positive and agreeing to buy food from an HIV positive food seller (34.4%) (Table 23). Lastly, over half of FSW believe they would keep it confidential if a relative were HIV positive.

**Table 23: Stigma related HIV and AIDS, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Agrees to take care of an HIV positive family member at home</b> Yes	418/604	69.2	66.3	61.4 – 70.9
<b>Agrees that an HIV positive student should be allowed to continue attending a school</b> Yes	299/605	49.4	47.2	42.4 – 51.8
<b>Agrees to buy food from an HIV positive food seller</b> Yes	215/605	35.5	34.4	30.0 – 38.7
<b>Thinks that, if a family member becomes HIV positive, his/her HIV status should remain confidential</b> Yes	351/605	58.0	58.3	54.1 – 62.6

### 8.1.19 HIV testing

While over two-thirds (64.1%) of FSW in Colombo know where to obtain an HIV test, only just over half (53.0%) have ever been tested, and less than half (41.6%) have been tested in the last 12 months and know their result. Of those who have never tested (47%), the main reason was not knowing where to go (71.4%). Almost all FSW (95.5%) had their last HIV test at a Government STD clinic, and almost all (95.9%) were satisfied or very satisfied with the services they received at their last test. Furthermore, more than three quarters (88.8%) disclosed to the provider that they are a sex worker. Amongst the six respondents who had an HIV test that came back positive, five already knew they were positive, and the remaining one had never before tested for HIV. Also, five FSW who knew they were positive used a condom at last sex with a client, and the one who did not know she was positive, believed that she was negative, and did not use a condom at last sex with a client (data not shown).

#### FSW Colombo

A 52 year old FSW said to always use condoms but to go for HIV testing once a month. The reason she gave for this is that condoms can be damaged. "I protect myself by going for a test". Another FSW also said to have had regular tests before. She has sons and wanted to protect herself. Lately though she has gone less regularly for tests, as she is taking precautions and is less active (with sex work).

**Table 24: HIV testing, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Knows where HIV testing can be obtained</b>				
Yes	392/605	64.8	64.1	60.0 – 68.0
<b>Ever tested for HIV</b>				
Yes	332/605	54.9	53.0	48.6 – 57.2
<b>The test was voluntary</b>				
Yes	291/332	87.7	88.9	84.9 – 93.0
<b>Site where last testing for HIV took place</b> (multiple answers possible)				
Government STD Clinic	318/332	95.8	95.5	93.1 – 98.0
Government non-STD Clinic	3/332	0.9	0.7	0 – 1.5
Private Clinic	5/332	1.5	1.4	0.1 – 2.6
Private Pharmacy or Chemist	9/332	2.7	3.2	0.9 – 5.5
Other <sup>20</sup>				
<b>Reasons for <u>never</u> getting an HIV test</b> (multiple answers possible)				
Don't know where to go	197/273	72.2	71.4	65.5 – 77.3
Always use condoms	40/273	14.7	12.5	8.2 – 16.5
Not at risk of getting HIV	9/273	3.3	3.0	1.0 – 4.9
Didn't have time/Too busy	63/273	23.1	25.2	19.4 – 31.2
I trust my partner	4/273	1.5	1.3	0 – 2.6
Afraid of knowing I may be HIV positive	2/273	0.7	0.3	0 – 0.7
Lack of confidentiality	2/273	0.7	0.9	0 – 1.9
Inconvenient testing location	13/273	4.8	5.4	2.6 – 8.3
No money	1/273	0.4	0.2	0 – 0.5
Other (embarrassed)	1/273	0.4	0.1	0 – 0.4
<b>Time since last HIV test</b>				
≤ 1 year	272/332	81.9	81.7	77.2 – 86.2
> 1 year	57/332	17.2	17.0	12.5 – 21.4
Don't know	3/332	0.9	1.3	0 – 2.8
<b>Knows result of last HIV test</b>				
Yes	318/332	95.8	96.2	94.3 – 98.2
<b>Tested for HIV in the past 12 months and knows result</b>				
Yes (among those who tested)	261/329	79.3	79.5	74.7 – 84.4
Yes (among all)	261/605	43.1	41.6	37.2 – 45.9

<sup>20</sup> Other: In jail (n=3)

Table 24: HIV testing, FSW Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for the last HIV test</b> (multiple answers possible)				
Wanted to know my HIV status	317/331	95.8	95.4	92.9 – 97.9
My partner asked me to get tested	9/331	2.7	2.8	0.9 – 4.6
Wanted to start sexual relations with a new partner	1/331	0.3	0.4	0 – 0.9
Wanted to get married	2/331	0.6	0.4	0 – 0.9
Need for loan/insurance coverage	0/331	0	0	-
Employer requested the test	1/331	0.3	0.4	0 – 1.2
Felt sick	4/331	1.2	1.3	0.05 – 2.6
Advised by health worker	7/331	2.1	1.8	0.3 – 3.2
Advised by peer educator	1/331	0.3	0.3	0 – 0.7
Pregnant	0/331	0	0	-
Other (compulsory test)	1/331	0.3	0.7	0 – 1.5
<b>Result of last HIV test</b>				
HIV-negative	313/332	94.3	95.1	93.1 – 97.2
HIV-positive	5/332	1.5	1.7	0.3 – 3.2
Indeterminate	0/332	0	0	-
Did not get the result	2/332	0.6	0.5	0 – 1.1
Don't know	12/332	3.6	2.6	1.2 – 4.0
<b>Reason for not getting last HIV test result</b>				
Didn't have time/Too busy	2/2	100	100	-
Not infected	0/2	-	-	-
Too scared	0/2	-	-	-
Testing centre didn't have result	0/2	-	-	-
<b>Perception of current HIV status</b>				
HIV-negative	441/605	72.9	75.8	72.3 – 79.6
HIV-positive	5/605	0.8	0.9	0.06 – 1.8
Don't know	159/605	26.3	23.3	19.5 – 26.8
<b>Satisfaction with quality of services provided during last HIV testing</b>				
Very satisfied	213/332	64.2	66.9	61.5 – 72.7
Satisfied	99/332	29.8	29.0	23.5 – 34.3
A little satisfied	6/332	1.8	1.5	0.4 – 2.6
Not satisfied	12/332	3.6	2.1	0.9 – 3.2
Don't know	2/332	0.6	0.4	0 – 0.9
<b>Told health care provider or counsellor that they exchanged sex for money at last HIV testing</b>				
Yes	302/332	91.0	88.8	83.7 – 93.7

Table 24: HIV testing, FSW Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for not telling health care provider or counsellor they exchange sex for money</b> (multiple answers possible)				
Afraid of discrimination/Not providing testing	4/30	13.3	25.7	0.6 – 51.7
Afraid provider would tell police/legal authorities	4/30	13.3	7.6	0 – 15.6
It was not necessary to discuss	19/30	63.3	57.0	32.5 – 80.4
Afraid provider would not keep information confidential	5/30	16.7	13.3	1.1 – 25.3
Little or no contact/interaction with counsellor/provider	0/30	-	-	-
Shy/Embarrassed	6/30	20.0	16.7	3.0 – 30.7
Provider already knew	0/30	-	-	-
<b>Felt that health care provider or counsellor reacted in a negative or discriminatory way because they exchange sex for money</b>				
Yes	20/302	6.6	6.4	3.4 – 9.3
<b>Health care provider or counsellor's behaviour</b> (multiple answers possible)				
It was uncomfortable	17/20	85.0	85.8	71.1 – 100
Stopped talking to me	1/20	5.0	2.0	0 – 5.4
Asked me to leave	0/20	-	-	-
Verbally abused or scolded me	2/20	10.0	11.9	0 – 27.7

### 8.1.20 Experience of stigma, discrimination and violence

Experiences of stigma, discrimination and violence are relatively low amongst FSW in Colombo, with less than ten percent being refused healthcare in the past 12 months (2.7%), being refused police assistance (5.3%), received verbal insults (9.5%), being physically assaulted (1.4%), or sexually assaulted (1.8%) (Table 25). Less than a third of FSW sought medical treatment (29.9%, 3 out of 12) or reported it to the police (26.0%, 2 out of 12) the last time they were sexually assaulted or raped.

During the qualitative interviews a number of FSW talked about being abused by current or former spouses. A 52 year old FSW said that her second husband, who is an alcoholic, sold her property. He abuses her, but as he works at the police, she does not ever submit a complaint. She suffers but tolerates the situation because of her 17 year old son, who would otherwise not have a father. A 55 year old FSW said that her husband used to rape her, and later left her for another wife. Another FSW shared the following story:

#### FSW Colombo

*"I was 12 years when I was raped. I went to work in garment factory to cut thread. I got a false passport saying I was 19 and went to Dubai. I worked there in the garment factory also. I worked for 3 years and I then returned and went back to the boy who raped me, he was into drugs, inhaling not injecting. He was then 26 years old. I was 16 and for 20 years I lived with him but had no children ... I am now 37 years old and doing this since 20 years and I am still working in the same area."*

FSW also talked about harassment by police, being arrested, and living in a culture of abuse and rape.

**Table 25: Experience of stigma, discrimination and violence, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Has been refused health care because someone believed they sold sex to men</b> Yes	16/604	2.6	2.7	1.2 – 4.2
<b>Has been refused police assistance because someone believed they sold sex to men</b> Yes	36/605	6.0	5.3	3.3 – 7.3
<b>Has been verbally insulted because someone believed they sold sex to men</b> Yes	59/605	9.8	9.5	7.0 – 12.0
<b>Has been hit, kicked, or beaten because someone believed they sold sex to men</b> Yes	9/605	1.5	1.4	0.4 – 2.3
<b>Has been sexually assaulted or raped</b> Yes	12/605	2.0	1.8	0.7 – 2.9
<b>Type of abuser last time they were sexually assaulted or raped</b>				
Unknown person	6/11	54.5	49.9	17.8 – 80.0
Social acquaintance	0/11	-	-	-
Family member/Relative	2/11	18.2	14.8	0 – 33.8
Police	0/11	-	-	-
Client	2/11	18.2	27.0	0 – 60.4
Other sex worker	0/11	-	-	-
Pimp	0/11	-	-	-
Non-paying partner or boyfriend	1/11	9.1	8.2	0 – 23.5
<b>Sought medical treatment after sexual assault/rape</b> Yes	3/12	25.0	29.9	0 – 61.7
<b>Reported sexual assault/rape to the police</b> Yes	2/12	16.7	26.0	0 – 56.1

### 8.1.21 Health care utilization and pregnancy

Less than ten percent (8.9%) of FSW in Colombo have sought medical care in the last 12 months, and of those who did, few (4.9%) had any difficulty, which was mainly due to not being able to take time from work (66.7%, 2 out of 3)<sup>21</sup> (Table 26). A small number of FSW in Colombo are pregnant (3.0%), but nearly a quarter (19.6%) have given birth in the last five years. Of those who gave birth in the last five years and are currently pregnant, more than three quarters visited an ANC for prenatal care. Only just over half were offered an HIV test during their most recent pregnancy; however the sample size is very small (n=4).

<sup>21</sup> Sample proportion, rather than population estimate, provided as only n=3.

**Table 26: Health care utilization and pregnancy, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Sought medical care for any reason during last 12 months</b>				
Yes	55/605	9.1	8.9	6.6 – 11.2
<b>Had difficulty getting medical care during last 12 months</b>				
Yes	3/55	5.5	4.9	3.3 – 6.4
<b>Type of difficulty</b> (multiple answers possible)				
Too expensive	0/3	-	-	-
Too far away	0/3	-	-	-
Could not take time from work	2/3	66.7	64.0	10.4 – 100
Long waiting times	1/3	33.3	36.9	0 – 89.4
<b>Currently pregnant</b>				
Yes	19/605	3.1	3.0	1.6 – 4.4
<b>Gave birth in the last 5 years</b>				
Yes	119/605	19.7	19.6	16.0 – 23.3
<b>Visited ANC for prenatal care during most recent pregnancy<sup>22</sup></b>				
Yes	4/5	80.0	77.8	38.9 - 100
<b>Visited ANC for prenatal care in the last 12 months</b>				
Yes	4/4	100	100	-
<b>Offered HIV test at ANC or maternity during most recent pregnancy</b>				
Yes	2/4	50.0	51.7	-
<b>HIV status during most recent pregnancy</b>				
HIV-negative	1/2	50.0	55.2	-
HIV-positive	0/2	-	-	-
Indeterminate	0/2	-	-	-
Didn't get the result	0/2	-	-	-
Don't know	1/2	50.0	44.8	-
<b>Received ART</b>				
Yes	-	-	-	-
<b>Baby received ART</b>				
Yes	-	-	-	-
<b>Sought medical care for any reason during last 12 months</b>				
Yes	55/605	9.1	8.9	6.6 – 11.2

### 8.1.22 Programme coverage

Very few FSW in Colombo (16.1%) have had contact with a health peer educator in the last six months, but those who did were in contact frequently, with over three quarters in contact two or more times (89.7%), mainly for general HIV/STI prevention /transmission information (100%) and condoms (90.4%) (Table 27). Just over a quarter (28.2%) of FSW in Colombo have been reached

<sup>22</sup> Due to an error in a skip pattern, this question was only asked amongst those who are both currently pregnant and have given birth in the last 12 months.



according to the GARP prevention programmes indicator which is a composite indicator of having received free condoms in the last 12 months and knowing where to go for an HIV test.

Two FSW said that they receive condoms from a social service organization free of charge. They also said that the contact person just asks “do you want this” (the condoms) but he does not provide information on why to use them.

**Table 27: Programme coverage, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Contact with a health peer educator in the community in the last 6 months</b>				
Yes	104/605	17.2	16.1	13.0 – 19.0
<b>Number of times of contact with a health peer educator in the last 6 months</b>				
1	12/104	11.5	10.3	0 – 22.6
2	44/104	42.3	40.8	32.2 – 49.2
≥ 3	48/104	46.2	48.9	34.6 – 63.6
<b>Services or information received from the health peer educator</b> (multiple answers possible)				
General HIV/STI prevention /transmission information	104/104	100	100	-
Condoms	91/104	87.5	90.4	85.3 – 95.9
Referral for STI treatment	13/104	12.5	14.4	6.4 – 22.5
Referral for VCT	1/104	1.0	0.9	0 – 2.4
Medical visit	2/104	1.9	1.1	0 – 2.4
<b>Reached with HIV prevention programs</b> (received free condoms in the last 12 months and know where HIV testing can be obtained)				
Yes	181/605	29.9	28.2	24.2 – 32.1

Bivariate analysis shows that street based FSW are more in touch with peer educators (45.2%) than massage parlor based (16.3%) and brothel based (10.6%) FSW (Table 28).

**Table 28: Programme coverage crosstabs, FSW Colombo**

Places where they normally find clients	Number of times of contact with a health peer educator in the last 6 months			Total N (%)
	1 n (%)	2 n (%)	≥ 3 n (%)	
Street-park, or public transport	1 (8.3)	24 (54.5)	22 (45.8)	47 (45.2)
Massage parlour, Spa or Salon	8 (66.7)	9 (20.5)	0 (0)	17 (16.3)
Brothel	0 (0)	4 (9.1)	7 (14.6)	11 (10.6)
Other	3 (25.0)	7 (15.9)	19 (39.6)	29 (27.9)
<b>Total</b>	<b>12 (100)</b>	<b>44 (100)</b>	<b>48 (100)</b>	<b>104 (100)</b>

### 8.1.23 Alcohol and drug use

Just over a quarter of FSW have ever consumed alcohol, and of those that do consume alcohol, the frequency is not high (only 6.7% report drinking every day) (Table 29). Furthermore, only a handful of respondents (0.5%) have injected drugs in the last 12 months, and of those who did,

none shared needles. Drug use is infrequent amongst FSW in Colombo, with most FSW having never used heroin (86.4%), cannabis (99.2%), cocaine (99.7%), ecstasy (99.9%), amphetamines (99.7%), opium (99.7%), and hashish (99.7%).

**Table 29: Alcohol and drug use, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever consumed alcohol</b>				
Yes	188/602	31.2	28.4	24.5 – 32.0
<b>Alcohol consumption in the last 4 weeks</b>				
Never drink alcohol	3/187	1.6	1.6	0 – 3.4
Never in the last 4 weeks	76/187	40.6	40.5	33.2 – 47.7
Once a week	54/187	28.9	27.2	20.3 – 33.8
Less than once a week	42/187	22.5	23.9	17.4 – 30.5
Every day	11/187	5.9	6.7	2.6 – 10.7
Don't know	1/187	0.5	0.2	0 – 0.05
<b>Injected drugs in the last 12 months</b>				
Yes	3/570 <sup>23</sup>	0.5	0.5	0 – 1.1
<b>Frequency of injecting drugs in the last 12 months</b>				
Once a month or less	2/3	66.7	52.4	-
2-4 times a month	1/3	33.3	47.6	-
2-3 times a week	0/3	-	-	-
≥ 4 times a week	0/3	-	-	-
<b>Type of drug injected most often</b>				
Heroin	3/3	100	100	-
Meth	0/3	-	-	-
Speedball (heroin + cocaine)	0/3	-	-	-
<b>Shared needles/syringes</b>				
Yes	0/3	-	-	-
<b>Heroin</b>				
Didn't use it in the last 6 months	4/571	0.7	0.7	0.03 – 1.4
Once a month or less	12/571	2.1	1.7	0.9 – 2.5
Several times a month	12/571	2.1	1.9	0.8 – 3.0
2-4 times a month	4/571	0.7	0.8	0 – 1.9
2-3 times a week	19/571	3.3	3.2	1.3 – 4.9
≥ 4 times a week	30/571	5.3	5.3	3.2 – 7.4
Have never used	490/571	85.8	86.4	82.7 – 90.0
<b>Cannabis</b>				
Didn't use it in the last 6 months	4/564	0.7	0.6	0.03 – 1.1
Once a month or less	0/564	-	-	-
Several times a month	1/564	0.2	0.1	0 – 0.3
2-4 times a month	0/564	-	-	-
2-3 times a week	0/564	-	-	-
≥ 4 times a week	1/564	0.2	0.1	0 – 0.3
Have never used	558/564	98.9	99.2	98.6 – 99.8

<sup>23</sup> Large number of missing data for this variable (n=35).

Table 29: Alcohol and drug use, FSW Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Cocaine</b>				
Didn't use it in the last 6 months	2/562	0.4	0.3	0 – 0.7
Once a month or less	0/562	-	-	-
Several times a month	0/562	-	-	-
2-4 times a month	0/562	-	-	-
2-3 times a week	0/562	-	-	-
≥ 4 times a week	0/562	-	-	-
Have never used	560/562	99.6	99.7	99.3 – 100
<b>Ecstasy</b>				
Didn't use it in the last 6 months	1/560	0.2	0.1	0 – 0.4
Once a month or less	0/560	-	-	-
Several times a month	0/560	-	-	-
2-4 times a month	0/560	-	-	-
2-3 times a week	0/560	-	-	-
≥ 4 times a week	0/560	-	-	-
Have never used	559/560	99.8	99.9	99.6 – 100
<b>Amphetamines</b>				
Didn't use it in the last 6 months	2/561	0.4	0.3	0 – 0.7
Once a month or less	0/561	-	-	-
Several times a month	0/561	-	-	-
2-4 times a month	0/561	-	-	-
2-3 times a week	0/561	-	-	-
≥ 4 times a week	0/561	-	-	-
Have never used	559/561	99.6	99.7	99.3 – 100
<b>Opium</b>				
Didn't use it in the last 6 months	2/564	0.4	0.3	0 – 0.7
Once a month or less	0/564	-	-	-
Several times a month	0/564	-	-	-
2-4 times a month	0/564	-	-	-
2-3 times a week	0/564	-	-	-
≥ 4 times a week	0/564	-	-	-
Have never used	562/564	99.6	99.7	99.3 – 100
<b>Hashish</b>				
Didn't use it in the last 6 months	2/560	0.4	0.3	0 – 0.7
Once a month or less	0/560	-	-	-
Several times a month	0/560	-	-	-
2-4 times a month	0/560	-	-	-
2-3 times a week	0/560	-	-	-
≥ 4 times a week	0/560	-	-	-
Have never used	558/560	99.6	99.7	99.3 – 100

#### 8.1.24 Media usage

Overall, media usage amongst FSW in Colombo is not particularly high, with less than half of FSW listening to the radio (43%), reading the newspaper (21.8%), and using the internet (1.2%) most days or every day. The only media outlet used more frequently is the television, with nearly two-thirds of FSW (61.9%) watching most days or every day (Table 30). Over three quarters of FSW in

Colombo (77.7%) have a mobile phone, and of those more than three quarters (85.4%) use their mobile to communicate with other FSW, and would be interested in receiving HIV and health related text message (81.3%).

**Table 30: Media usage, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Radio</b>				
Never	328/605	54.2	55.6	50.6 – 60.5
Once a month	0/605	-	-	-
Once a week	8/605	1.3	1.3	0.4 – 2.1
Most days	162/605	26.8	26.1	22.1 – 30.1
Every day	106/605	17.5	16.9	13.6 – 20.3
Don't know	1/605	0.2	0.1	0 – 0.3
<b>TV</b>				
Never	217/605	35.9	36.9	32.5 – 41.4
Once a month	1/605	0.2	0.06	0 – 0.2
Once a week	7/605	1.2	1.1	0.3 – 1.9
Most days	210/605	34.7	34.4	30.3 – 38.4
Every day	170/605	28.1	27.5	23.4 – 31.5
<b>Newspaper</b>				
Never	432/605	71.4	72.7	68.7 – 76.9
Once a month	6/605	1.0	0.9	0.06 – 1.8
Once a week	35/605	5.8	6.2	4.2 – 8.2
Most days	91/605	15.0	14.5	11.5 – 17.5
Every day	41/605	6.8	5.6	3.6 – 7.4
<b>Internet</b>				
Never	593/605	98.0	97.9	96.6 – 99.2
Once a month	3/605	0.5	0.5	0 – 1.0
Once a week	3/605	0.5	0.4	0 – 0.8
Most days	5/605	0.8	1.1	0 – 2.2
Every day	1/605	0.2	0.1	0 – 0.4
<b>Has a mobile phone</b>				
Yes	467/605	77.2	77.7	74.1 – 81.3
<b>Uses mobile phone to communicate with other FSW</b>				
Yes	397/467	85.0	85.4	82.1 – 88.8
<b>Interested in receiving HIV and health-related text messages</b>				
Yes	383/605	82.0	81.3	77.2 – 85.4
<b>Interested in attending learning activities</b>				
Yes	467/605	77.2	75.9	71.5 – 80.1

### 8.1.25 Network size and multiplier questions

FSW in Colombo estimate the average number of FSW living in Colombo to be 5,989.7, of whom an average of 5,691.3 are above the age of 18 (Table 31). In terms of multiplier questions, just under half (47.7%) of FSW have been treated at an STD clinic in 2014, and the data presented in this table ideally would have been used by the NSACP programme to undertake multiplier method for PSE, by cross referencing existing STD clinic routine data; however, after extensive review of the data, it

was established that the three required criteria for multiplier method were not met. Nevertheless, the data is presented here, despite the fact that the multiplier method calculations could not be undertaken. This is explained further in the limitation section of this report.

Two FSW in Colombo said to have a network of around 12 friends who exchange telephone numbers of clients. They all live in the same neighbourhood. They estimated that in the same neighbourhood there are around 50 other FSW, including young ones, with whom they are not in contact. The 12 friends in the network are all of the same age, in their late thirties, or early forties. A FSW involved in a service organization talked about the fact that there are many different FSW in Colombo. FSW in brothels, streets, hotel rooms, mobile brothers, in cinemas, use of mobile phone, and or intermediaries. A number of FSW shared to have lived for some time in their lives in the Middle East, which increases their sexual networks over the course of their lives.

**Table 31: Network size and multiplier questions, FSW Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Estimation of the number of FSW who live in Colombo</b>	501/605			
Mean	6,521.9	-	5,989.7	-
SD	9,262.8	-	8,170.0	-
Median	4,000.0	-	4,000.0	-
Range	25 - 80,000	-	-	-
<b>Estimation of the number of FSW older than 18 who live in Colombo</b>				
Mean	6,219.2	-	5,691.3	-
SD	9,214.3	-	8,143.5	-
Median	3,800.0	-	3,760.0	-
Range	15 - 80,000	-	-	-
<b>Number of FSW older than 18 seen in the last month* (network size question)</b>				
Mean	8.24	-	6.7	-
SD	3.8	-	3.3	-
Median	8.0	-	8.0	-
Range	1 - 20	-	-	-
<b>Tested for HIV at Government STD (NSACP) clinic in 2014</b>				
Yes	230/605	38.0	37.5	33.3 - 41.8
<b>Names of NSCAP clinics visited in 2014<sup>24</sup></b>				
STD clinic - Colombo	170/605	28.1	26.3	22.4 - 30.0
STD clinic - Gampaha	3/605	0.5	0.4	0 - 0.8
STD clinic - Kalubowila	42/605	6.9	8.0	5.4 - 10.7
STD clinic - Ragama	9/605	1.5	1.4	0.5 - 2.2
STD clinic - Matara	1/605	0.2	0.5	0 - 1.3
STD clinic - Kandy	1/605	0.2	0.1	0 - 0.3
STD clinic - Negombo	1/605	0.2	0.2	0 - 0.6

<sup>24</sup> Among 308 participants who said they tested for HIV at an NSACP clinic, 302 (98.1%) also provided the name of the clinic and date of testing. Among them, 75 (24.8%) visited the clinic before 2014, and the remaining 227 participants in 2014.

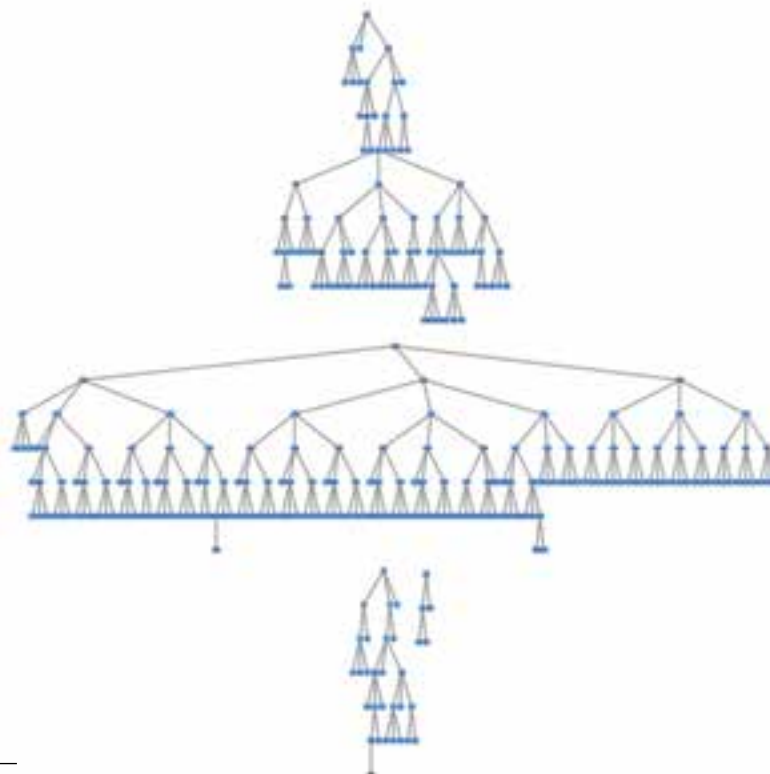
## 8.2 Galle

A total of 302 FSW were recruited in Galle, surpassing the target of  $n=300$ . Three seeds were initially recruited, through contacts with NGOs and contacts from the FA, but following a slow recruitment the fourth seed was introduced. The estimator used was Gile's SS with a population size estimate of 1,754 (low estimate of 324, and high estimate of 2,859), 0.95 confidence interval and 5,000 bootstraps.

### 8.2.1 Network properties

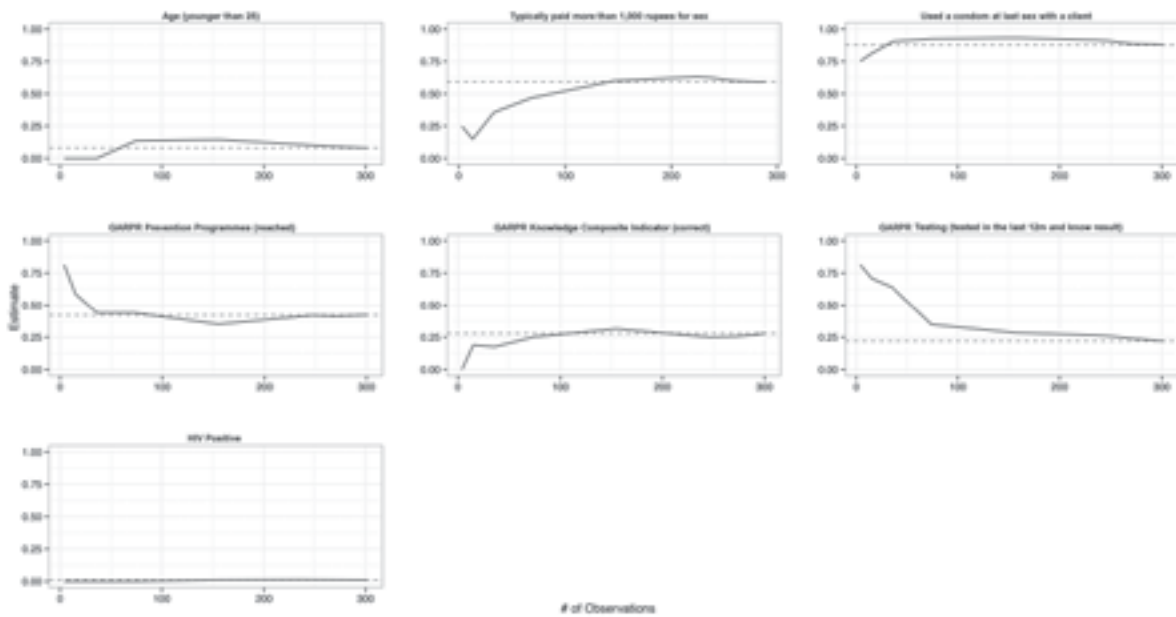
The recruitment tree for FSW in Galle is illustrated in Figure 6, showing three of the four seeds produced recruitment chains, to a maximum of nine waves. Two participants reported network sizes of 28 and 50 FSW, respectively. Their network sizes were lowered to 22, the 99th percentile value. Additionally, 27 participants (8.9%) did not report a network size, and were imputed with the median value of 5. The strength of the association between the network size question in the questionnaire and the separate network size form implemented one month in to data collection was strong,  $r = .63$  ( $p < .01$ )<sup>25</sup> The recruitment in Galle with FSW was slow to begin, but when a seed was introduced amongst younger FSWs at brothels, FSW across Galle were more encouraged to participate in the survey. An additional mechanism that was introduced in order to increase recruitment was that mobile numbers were collected at time of distribution of coupons, and if FSW had not recruited anyone within 5 days, a follow up reminder phone call from the coupon manager was enacted. All mobile numbers were destroyed after one week, and the coupon manager was the only person to have access to these mobile numbers. All these factors contributed to the fact that the last seed introduced produced a long recruitment chain, in a shorter period of time, compared with the other seeds. It is important to note that very rapid recruitment in RDS could also potentially be seen as a bias.

**Figure 6: Recruitment tree, FSW Galle**



<sup>25</sup> Pearson correlation coefficient .

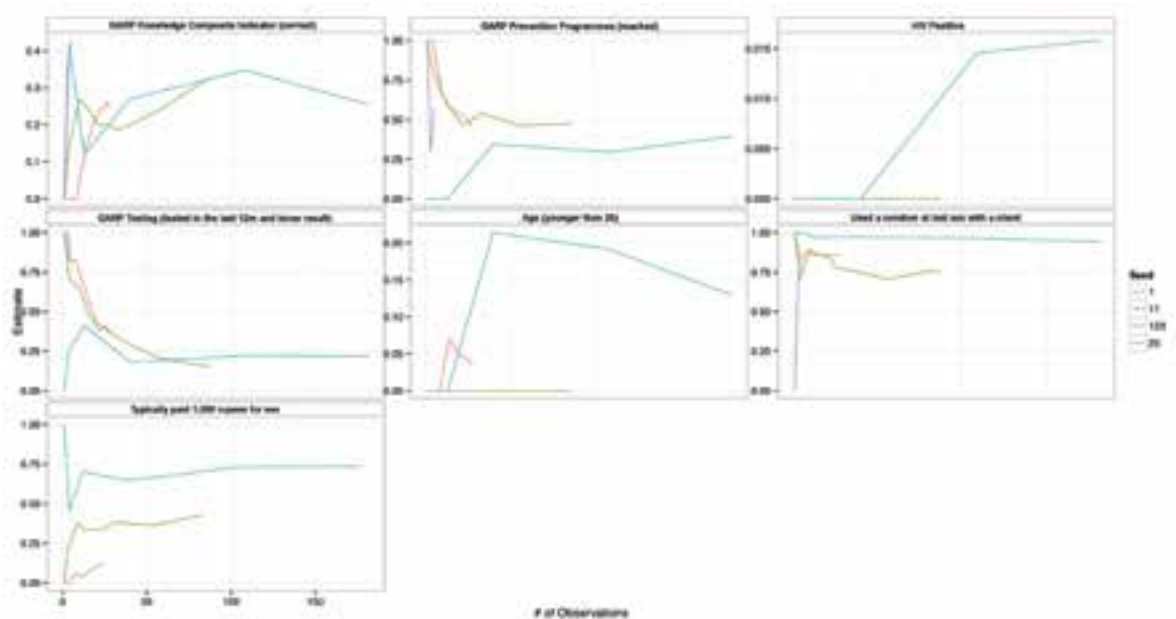
**Figure 7: Convergence on key indicators, FSW Galle**



### 8.2.3 Bottleneck plots

Bottleneck plots are less useful when recruitment is mostly coming from one seed, as is the case with FSW in Galle. There appears to be slight divergence on typical amount money received for sex, reached by prevention programmes and condom usage with a client; however, this is challenging to ascertain given most recruitment came from one seed.

**Figure 8: Bottleneck plots, FSW Galle**



### 8.2.4 Homophily

Homophily amongst FSW in Galle for key indicators ranges from 0.98 to 1.15 which is within acceptable ranges (Table 32).

**Table 32: Homophily, FSW Galle**

Indicator	Recruitment homophily	Estimated population homophily
HIV	1.00	0.86
Active syphilis	-	-
Used a condom at last sex with a client	1.00	1.05
Received free condoms from NGOs or a health care centre in the last 12 months and know where to obtain an HIV test	1.28	1.15
Correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	1.00	0.98
Tested for HIV in the past 12 months and knows result	1.06	1.15

### 8.2.5 Study and recruiter information

The most common reasons for participating in the IBBS survey include the HIV test (76.8%) and interest in HIV and sexual health (13.9%) (Table 33). Nearly all respondents (96.6%) received their coupons from a friend or acquaintance. The screener was 100% confident that all FSW in Galle were true members of the target population.

**Table 33: Study and recruiter information, FSW Galle**

Characteristic	Sample proportions	
	n/N	%
<b>Main reason for participation in the study</b>		
Interest in HIV and sexual health	42/302	13.9
HIV test	232/302	76.8
Interest in issues related to FSW	9/302	3.0
Helping the community	1/302	0.3
Friend wanted me to participate	13/302	4.3
Someone forced me	2/302	0.7
Incentive/Gift	3/302	1.0
<b>Mode of receiving the coupon</b>		
From a friend/acquaintance	288/298 <sup>26</sup>	96.6
Found it	10/298	3.4
Bought it/Exchanged it for something	0/298	-
<b>Length of time they knew the person who gave them the coupon</b>		
< 6 months	67/288	23.3
6 months – 1 year	96/288	33.3
> 1 year	125/288	43.4
<b>Screener's confidence that participant is FSW</b>		
Confident	302/302	100
Somewhat confident	0/302	-
Not confident	0/302	-

<sup>26</sup> Seeds have been removed from this indicator as the IBBS team purposefully distributes those coupons.



## 8.2.6 Biological test results

The prevalence of HIV and syphilis amongst FSW in Galle is 1.0% and 0.0%, respectively (Table 34).

**Table 34: Biological test results, FSW Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
HIV	4/302	1.3	1.0	0.09 – 1.8
Syphilis – Active	0/302	-	-	-
Syphilis – Non-Active	0/302	-	-	-
Syphilis (active and non-active)	0/302	-	-	-

## 8.2.7 Socio-demographic characteristics

The average age of FSW in Galle is 37.6 years, with all respondents identifying as female by birth, and being born in Sri Lanka (Table 35). Nearly all are Sinhalese (93.4%), speak Sinhalese at home (93.7%), and have lived in Galle for more than one year (97.7%). More than three quarters (81.3%) indicated they are literate, however, only just under a third (31.3%) completed high school (passed their O levels). Nearly three quarters (73.3%) have a monthly personal income between 10,000 and 40,000 rupees, and nearly all share this income with other persons/dependents (99.2%). Just over a quarter (26.6%) has other sources of income, mainly as a hairdresser/beautician/masseuse (58.6%), factory worker (12.9%) or street vendor/casual labourer (12.8%).

**Table 35: Socio-demographic characteristics, FSW Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Age</b>				
Mean	37.4	-	37.6	-
SD	9.5	-	9.9	-
Median	36.0	-	37.0	-
Range	20 – 75	-	-	-
<b>Age groups</b>				
Aged under 20	0/302	-	-	-
Aged under 25	19/302	6.3	8.1	4.4 – 12.1
18 – 24	19/302	6.3	8.1	4.4 – 12.1
25 – 34	113/302	37.4	34.4	28.7 – 39.4
35 – 44	101/302	33.4	33.1	27.4 – 38.6
≥ 45	69/302	22.8	24.5	19.4 – 29.9
<b>Sex</b>				
Female	302/302	100	100	-
<b>Sex same as at birth</b>				
Yes	302/302	100	100	-
<b>Citizenship</b>				
Sri Lankan	302/302	100	100	-
<b>Country of birth</b>				
Sri Lanka	302/302	100	100	-

Table 35: Socio-demographic characteristics, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ethnicity</b>				
Sinhalese	281/302	93.0	93.4	90.7 – 96.2
Sri Lankan Tamil	14/302	4.6	4.8	2.2 – 7.5
Indian Tamil	1/302	0.3	0.3	0 – 0.8
Moor	1/302	0.3	0.2	0 – 0.5
Burgher	0/302	-	-	-
Malay	1/302	0.3	0.3	0 – 0.7
Other (Muslim/Islam)	4/302	1.3	0.9	0.09 – 1.7
<b>District of residence during the past one year</b>				
Galle	295/302	97.7	97.7	95.8 – 99.6
Other <sup>27</sup>	7/302	2.3	2.3	0.4 – 4.2
<b>Length of time lived in Galle</b>				
< 1 year	11/299	3.7	3.5	1.2 – 5.6
≥ 1 year	288/299	96.3	96.5	94.4 – 98.8
<b>Primary residence</b>				
Galle	204/302	67.5	68.2	62.6 – 73.9
Other	98/302	32.5	31.8	26.1 – 37.4
<b>Language spoken at home</b> (multiple answers possible)				
Sinhalese	282/302	93.4	93.7	91.1 – 96.4
Tamil	20/302	6.6	6.3	3.6 – 8.9
English	0/302	-	-	-
Other <sup>28</sup>	1/302	0.3	0.3	0 – 0.7
<b>Literate</b>				
Yes	253/302	83.8	81.3	75.9 – 86.3
<b>Highest level of education</b>				
Never attended school	15/302	5.0	5.2	2.6 – 8.0
Grade 1-5	65/302	21.5	22.9	18.3 – 27.7
Grade 6-10	125/302	41.4	40.8	35.0 – 46.5
Passed O/L	76/302	25.2	25.3	20.2 – 30.6
Passed A/L	20/302	6.6	5.6	3.3 – 7.7
Completed Diploma	0/302	-	-	-
Completed Degree	1/302	0.3	0.2	0 – 0.4
<b>Currently a student</b>				
Yes	1/302	0.3	0.3	0 – 0.8
<b>Type of institution enrolled in<sup>29</sup></b> (among current students)				
University	-	-	-	-
Technical College	-	-	-	-
Vocational School	-	-	-	-

<sup>27</sup> Other: Colombo (n=3), Mathara (n=2), Kandy (n=1), Kalutara (n=1).

<sup>28</sup> Other: Muslim (n=1) indicated, unclear if this means Arabic or another language

<sup>29</sup> Educational institution not provided

Table 35: Socio-demographic characteristics, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Monthly personal income</b>				
< 5,000 Rupees	15/291	5.2	5.2	2.0 – 8.5
5,000-10,000	36/291	12.4	13.0	8.4 – 17.8
10,001-20,000	56/291	19.2	17.4	12.7 – 21.8
20,001-30,000	90/291	30.9	31.2	24.7 – 37.8
30,001-40,000	68/291	23.4	24.7	19.3 – 30.4
> 40,000	19/291	6.5	5.5	2.5 – 8.3
Don't know	7/291	2.4	2.9	0.8 – 5.0
<b>Number of people dependent on that income</b>				
Mean	3.5	-	3.4	-
SD	1.5	-	1.5	-
Median	3.0	-	3.0	-
Range	0 – 8	-	-	-
0	3/298	1.0	0.8	0 – 1.5
1	18/298	6.0	6.6	3.8 – 9.6
2	54/298	18.1	19.2	14.3 – 24.3
3	92/298	30.9	31.5	26.1 – 37.0
4	56/298	18.8	18.9	13.7 – 24.1
5 and more	75/298	25.2	23.0	18.1 – 27.4
<b>Has source/s of income other than sex work</b>				
Yes	79/302	26.2	26.6	21.5 – 31.8
<b>Occupation</b>				
Street vendor/casual labourer	11/76	14.5	12.8	10.1 – 24.3
Factory worker	11/76	14.5	12.9	0 – 55.8
Professional/banker/accountant	1/76	1.3	1.1	0.8 – 1.3
Teacher	0/76	-	-	-
Business owner	2/76	2.6	2.2	0 – 10.5
Hairdresser/beautician/masseuse	39/76	51.3	58.6	-
Waitress/bartender/hotel employee	4/76	5.3	3.7	0 – 22.4
Musician/dancer/performer	0/76	-	-	-
Tourism/travel agent/tour guide	1/76	1.3	1.1	0 – 14.3
Government worker	1/76	1.3	1.1	0.8 – 1.3
Security guard	1/76	1.3	1.1	0.8 – 1.3
Fisherman/seafarer	1/76	1.3	1.1	0.8 – 1.3
Farmer/agriculture worker	1/76	1.3	1.1	0.8 – 1.3
Taxi driver/Three wheeler driver	5/76	6.5	5.4	0.4 – 10.2
Other <sup>30</sup>				

Most FSW in Galle are married (40.9%), living with their children (29.7%) and their husband (27.1%).

A FSW of 36 years explained that her husband is ill, and her sister had an accident with a lamp in the garment factory and still needs a lot of care and operations. This is why she is involved in sex work. She does not work in a hotel, but get clients via phone.

<sup>30</sup> Daycare centre (n=1), food business (n=1), house maid (n=1), communication (n=1), rent income (n=1).

**Table 36: Marital status, living arrangement and children, FSW Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Marital status</b>				
Single (never married)	31/301	10.3	10.1	6.7 – 13.6
Living together but not married	13/301	4.3	6.4	3.1 – 10.1
Married	132/301	43.9	40.9	34.4 – 46.8
Divorced/Separated	89/301	29.6	31.1	25.2 – 37.4
Widowed	36/301	12.0	11.4	7.9 – 14.8
<b>Mode of living</b> (multiple answers possible)				
Alone	57/302	18.9	19.1	14.4 – 23.8
With husband	88/302	29.1	27.1	21.2 – 32.6
With other sexual partner	71/302	23.5	25.3	19.9 – 30.1
With parents	36/302	11.9	11.1	7.3 – 14.6
With siblings	12/302	4.0	3.9	1.7 – 6.0
With children	95/302	31.5	29.7	21.1 – 38.0
With other family/relatives	10/302	3.3	3.9	1.6 – 6.3
With friend/roommate (not sexual partner)	5/302	1.7	1.9	0.4 – 3.5
With co-workers	6/302	2.0	1.7	0.3 – 3.0
<b>Type of residence</b>				
Temporary shelter	38/302	12.6	14.0	10.0 – 18.4
Boarding house	96/302	31.8	31.1	25.4 – 36.6
Parents' home	27/302	8.9	9.6	5.6 – 13.7
Their own home	125/302	41.4	39.1	31.2 – 46.5
Lodging	3/302	1.0	1.5	0 – 3.3
On the street	6/302	2.0	2.3	0.3 – 4.3
Brothel	6/302	2.0	2.3	0.5 – 4.3
Other <sup>31</sup>	1/302	0.3	0.2	0 – 0.4
<b>Has children</b>				
Yes	250/302	82.8	82.6	78.1 – 87.1
<b>Number of children</b>				
1	70/250	28.0	28.4	22.5 – 34.3
2	91/250	36.4	35.6	29.3 – 41.6
3	48/250	19.2	18.7	13.1 – 24.4
4	23/250	9.2	9.5	5.5 – 13.6
5 or more	18/250	7.2	7.8	4.3 – 11.4

### 8.2.8 General sexual history

The average of first vaginal sex amongst FSW in Galle is 20.2, with over a third of FSW (36.6%) having had vaginal before or up until the age of 18 (Table 37). Only just over a third of FSW (28.0%) have had anal sex. Most FSW have had between one and three (33.7%) or four to seven (32.8%) sexual partners in the past seven days, with a similar pattern also found for paying clients in the last seven days (one to three paying client: 35.6%, four to seven paying clients: 34.7%). Most FSW (87.8%) did not have a regular / non-paying client in the past seven days. The possibility of intergenerational sex was assessed, and in Galle there were no cases of sexual partners over 50 years of age, for age of partner at first sex (data not shown in table).

<sup>31</sup> Other: Workplace

**Table 37: General sexual history, FSW Galle**

Characteristic		Sample proportions		Population estimates	
		n/N	%	%	95% CI
<b>Age at first vaginal sex</b>					
	Mean	20.11	-	20.2	-
	SD	3.8	-	3.9	-
	Median	20.0	-	20.0	-
	Range	9 – 35 <sup>32</sup>	-	-	-
<b>Age groups at first vaginal sex</b>					
	< 16	25/299	8.4	8.4	5.5 – 11.3
	16 – 18	81/299	27.1	28.2	22.8 – 33.9
	19 – 24	152/299	50.8	49.5	43.5 – 55.2
	≥ 25	41/299	13.7	13.9	9.3 – 18.6
<b>Had anal sex</b>					
	Yes	86/292	29.5	28.0	22.5 – 33.4
<b>Age at first anal sex</b>					
	Mean	21.5	-	21.5	-
	SD	4.0	-	4.3	-
	Median	21.5	-	22.0	-
	Range	4 – 35 <sup>33</sup>	-	-	-
<b>Age groups at first anal sex</b>					
	< 16	1/76	1.3	1.9	1.3 – 2.6
	16 – 18	15/76	19.7	21.7	14.6 – 29.4
	19 – 24	46/76	60.5	57.4	43.5 – 70.6
	≥ 25	14/76	18.4	19.0	8.5 – 29.6
<b>Age of partner at first sex (vaginal or anal)</b>					
	Mean	24.4	-	24.5	-
	SD	4.6	-	4.7	-
	Median	24.0	-	24.0	-
	Range	16 – 45	-	-	-
<b>Age groups of partner at first sex (vaginal or anal)</b>					
	< 16	0/289	-	-	-
	16 – 18	16/289	5.5	5.3	2.9 – 7.6
	19 – 24	132/289	45.7	46.0	40.5 – 51.7
	≥ 25	141/289	48.8	48.7	43.2 – 54.2
<b>Number of <u>all</u> sexual partners in the last 7 days</b>					
	Mean	5.8	-	5.6	-
	SD	4.4	-	4.3	-
	Median	5.0	-	5.0	-
	Range	0 – 20	-	-	-
	0	18/302	6.0	5.1	2.6 – 7.5
	1-3	96/302	31.8	33.7	26.3 – 41.4
	4-7	99/302	32.8	33.7	28.2 – 39.4
	8-10	51/302	16.9	16.4	11.4 – 21.2
	11 or more	38/302	12.6	11.1	7.4 – 14.7

<sup>32</sup> After 9, the next lowest age is 13

<sup>33</sup> After 4, the next lowest age is 17

Table 37: General sexual history, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of paying sexual partners (clients) in the last 7 days</b>				
Mean	6.0	-	5.8	-
SD	4.3	-	4.2	-
Median	5.0	-	5.0	-
Range	0 – 20	-	-	-
0	3/284	1.1	1.0	0 – 2.2
1-3	97/284	34.2	35.6	27.5 – 44.1
4-7	96/284	33.8	34.7	29.0 – 40.6
8-10	51/284	18.0	17.4	12.4 – 22.4
11 or more	37/284	13.0	11.3	7.4 – 14.8
<b>Number of regular (non-paying) sexual partners in the last 7 days</b>				
Mean	0.18	-	0.17	-
SD	0.5	-	0.5	-
Median	0	-	-	-
Range	0 – 4	-	-	-
0	249/284	87.7	87.8	84.0 – 91.5
1	24/284	8.5	8.3	5.2 – 11.4
2 or more	11/284	3.9	3.9	1.8 – 6.0
<b>Number of all sexual partners in the last 30 days</b>				
Mean	16.1	-	15.7	-
SD	10.7	-	10.4	-
Median	15.0	-	15.0	-
Range	0 – 60	-	-	-
0	7/302	2.3	1.7	0.5 – 2.8
1-10	103/302	34.1	35.0	25.5 – 44.8
11-20	102/302	33.8	36.4	30.5 – 42.8
21-30	65/302	21.5	19.0	13.4 – 24.1
31 or more	25/302	8.3	7.8	4.6 – 11.0
<b>Reasons for not having sex in the last 30 days</b> (among those who reported 0 partners) (multiple answers possible)				
Have not found any clients	6/7	85.7	83.6	56.4 – 100
Other <sup>34</sup>	2/7	28.6	32.8	1.0 – 65.6

<sup>34</sup> Other: Staying with family (n=1), couldn't meet my partner (n=1)

Table 37: General sexual history, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of paying sexual partners (clients) in the last 30 days</b>				
Mean	16.22	-	15.8	-
SD	10.5	-	10.3	-
Median	15.0	-	15.0	-
Range	0 – 60	-	-	-
0	1/295	0.3	0.3	0 – 0.7
1-10	104/295	35.3	36.1	26.0 – 46.4
11-20	101/295	33.4	36.5	30.4 – 43.2
21-30	64/295	21.2	19.1	13.1 – 24.5
31 or more	25/295	8.3	8.0	4.7 – 11.2
<b>Number of regular (non-paying) sexual partners in the last 30 days</b>				
Mean	0.26	-	0.27	-
SD	0.7	-	0.7	-
Median	0	-	-	-
Range	0 – 5	-	-	-
0	249/295	84.4	83.5	79.1 – 87.7
1	25/295	8.5	9.3	6.0 – 12.8
2	15/295	5.1	5.1	2.7 – 7.5
3 or more	6/295	2.0	2.0	0.6 – 3.6

### 8.2.9 Sexual history with paying partners (clients)

The average age amongst FSW in Galle for first paid sex is 26.6 years, with most starting to sell sex after the age of 18 (92.6%) (Table 38). The most common reasons for selling sex include needing money (81.4%) and not having another job (28.8%). Half of FSW (50.0%) had one client on the last day they worked, a third (31.4%) had two clients, with the average amount of 1,455 Rupees received per last sex act, typically for vaginal sex (99.7%). Most FSW in Galle meet their clients through massage parlours / spas / salons (24.6%) and in streets / parks / public transport (23.8%). Furthermore, with most clients they go to hotels (60.4%) and massage parlours (23.7%) to have sex. The majority of FSW in Galle used a condom at last sex with a client (87.7%), with the women typically suggesting condom use (91.6%). Reasons for using condoms include to prevent STIs (71.6%) and not trusting their partner (50.4%), while reasons for not using condoms are predominantly not thinking it was necessary (33.2%), partner objection (25.2%), and never having heard of condoms (20.6%). Over a quarter of FSW (26.7%) have had sex with a client without a condom because they paid a higher fee. Two FSW (0.9%) said that their last client's HIV status was positive. The two respondents who reported their last client's HIV status as positive, reported condom usage at last sex (not shown in tables).

**Table 38: Sexual history with paying partners, FSW Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Age at first experience of selling sex</b>				
Mean	26.4	-	26.6	-
SD	7.4	-	7.6	-
Median	25.0	-	25.0	-
Range	14- 58	-	-	-
<b>Age groups at first experience of selling sex</b>				
< 16	1/289	0.3	0.5	0.4 – 0.6
16 – 18	19/289	6.6	6.8	3.8 – 9.9
19 – 24	119/289	41.2	40.6	34.3 – 46.9
≥ 25	150/289	51.9	52.0	45.6 – 58.6
<b>Reasons for first experience of selling sex</b> (multiple answers possible)				
Need money	245/300	81.7	81.4	76.8 – 85.9
Didn't have other job	84/300	28.0	28.8	23.0 – 34.8
Grew up around people who did sex work	5/300	1.7	1.8	0.3 – 3.3
Forced/Pressured into it	13/300	4.3	3.9	1.8 – 5.9
I like it/For pleasure	1/300	0.3	0.3	0 – 0.8
Encouraged by friends/people I know	9/300	3.0	2.4	0.8 – 3.9
It pays well	13/300	4.3	4.2	1.9 – 6.4
Abandoned by parents/siblings	6/300	2.0	2.3	0.6 – 4.1
Abandoned by husband	34/300	11.3	11.8	7.9 – 15.9
Extra money	4/300	1.3	1.0	0.2 – 1.8
Orphan	11/300	3.7	3.8	1.5 – 6.0
Don't know	1/300	0.3	0.2	0 – 0.6
Other <sup>35</sup>	2/300	-	-	-
<b>Condom use during last 30 days</b>				
Every time	221/293	75.4	73.8	68.3 – 79.1
Almost every time	38/293	13.0	13.8	9.4 – 18.3
Sometimes	28/293	9.6	10.5	6.8 – 14.4
Never	4/293	1.4	1.3	0.09 – 2.5
Don't know	2/293	0.7	0.6	0 – 1.3
<b>Had sex only <u>one time</u> with a majority of clients in the last 12 months</b>				
Yes, has sex only one time with most clients	162/301	53.8	52.5	46.2 – 58.5
No, has sex more than one time with most clients	135/301	44.9	45.3	39.3 – 51.3
Don't know	4/301	1.3	2.2	0 – 4.9

<sup>35</sup> Other: Death of a husband (n=1), to get drugs (n=1)



Table 38: Sexual history with paying partners, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of clients on the last day they sold sex</b>				
Mean	1.92	-	1.84	-
SD	1.1	-	1.1	-
Median	2.0	-	2.0	-
Range	1 – 6	-	-	-
1	132/291	45.4	50.0	43.2 – 56.7
2	95/291	32.6	31.4	26.0 – 36.5
3 or more	64/291	22.0	19.1	14.2 – 23.4
<b>Amount of money typically received for sex</b>				
Mean	1445.5	-	1455.2	-
SD	685.3	-	700.6	-
Median	1500.0	-	1500.0	-
Range	100 – 5000	-	-	-
≤ 1000 Rupees	122/289	42.2	40.9	34.7 – 46.7
> 1000 Rupees	167/289	57.8	59.1	53.3 – 65.3
<b>Type of sex last exchanged for that amount of money</b> (multiple answers possible)				
Oral sex	68/300	22.7	20.6	16.1 – 24.7
Vaginal sex	299/300	99.7	99.7	99.3 – 100
Anal sex	10/300	3.3	3.4	1.4 – 5.3
Short term (hours or less) companionship	11/300	3.7	4.8	1.6 – 8.2
Long term (i.e.: night/weekend) companionship	1/300	0.3	0.3	0 – 0.7
<b>Person who decides how much the client pays</b>				
Pimp/Tout	18/302	6.0	6.2	3.6 – 8.8
Owner of the brothel	74/302	24.5	24.9	19.6 – 30.2
Woman decides	184/302	60.9	60.7	54.9 – 66.4
The client decides	26/302	8.6	8.3	4.8 – 11.6

Table 38: Sexual history with paying partners, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Places where they normally find clients<sup>36</sup></b>				
Brothel Bar/café/disco/restaurant/night club	39/302	12.9	14.4	10.4 – 18.6
Hotel	4/302	1.3	0.9	0 – 2.0
Street, park, or public transport	40/302	13.2	16.2	11.0 – 22.0
Through friends	75/302	24.8	23.8	18.8 – 28.6
Internet, chat, or SMS	4/302	1.3	1.1	0 – 2.3
Motel or guest house	32/302	10.6	9.4	4.7 – 13.8
School	7/302	2.3	2.4	0.8 – 4.1
Party	0/302	-	-	-
Service station	0/302	-	-	-
Intermediary (pimp, bartender, taxi driver)	3/302	1.0	0.6	0 – 1.2
Truck stop / three wheeler stop	8/302	2.6	2.4	0.6 – 4.2
Truck stop / three wheeler stop	9/302	3.0	2.8	0.8 – 4.8
Massage parlour/Spa/Salon	76/302	25.2	24.6	17.7 – 31.5
Telephone	30/302	9.9	8.8	4.2 – 13.2
Other <sup>37</sup>	2/302	0.7	0.6	0 – 1.2
Don't know	3/302	1.0	0.8	0 – 1.8
<b>Places where they normally have sex with clients</b>				
Brothel	45/302	14.9	16.2	11.7 – 20.9
Hotel/Guest house	181/302	59.9	60.4	54.4 – 66.4
Massage parlour	73/302	24.2	23.7	17.7 – 29.5
Their own home	11/302	3.6	3.2	1.2 – 5.0
Client's home	9/302	3.0	2.7	1.1 – 4.2
Car	8/302	2.6	2.8	0.2 – 5.3
Park	7/302	2.3	2.3	1.1 – 3.6
<b>Used a condom at last sex with a client</b>				
Yes	269/302	89.1	87.7	83.6 – 91.6
<b>Person who suggested to use a condom</b>				
Woman did	250/269	92.9	91.6	87.4 – 95.6
Client did	19/269	7.1	8.4	4.4 – 12.6
<b>Reasons for using a condom (multiple answers possible)</b>				
To prevent HIV/STIs	191/269	71.0	71.6	66.4 – 76.9
Do not trust partner	137/269	50.9	50.4	43.8 – 56.9
Messages advising use of condoms	11/269	4.1	4.2	1.5 – 7.0
To prevent pregnancy	30/269	11.2	10.8	6.5 – 14.9
Other <sup>38</sup>	1/269	-	-	-

<sup>36</sup> Not a multiple answer question

<sup>37</sup> Other: Home (n=1), partner's village (n=1)

<sup>38</sup> Other: Partner requested (n=1)

Table 38: Sexual history with paying partners, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for <u>not</u> using a condom</b> (multiple answers possible)				
Never heard of condoms	10/33	30.3	20.6	8.5 – 30.9
Don't know how to obtain condoms	0/33	-	-	-
Didn't think it was necessary	9/33	27.3	33.2	18.8 – 49.1
Didn't think of it	0/33	-	-	-
Not available	3/33	9.1	11.1	0 – 23.5
Too expensive	0/33	-	-	-
Partner objected	7/33	21.2	25.2	9.7 – 41.5
Don't like them	2/33	6.1	6.4	0 – 14.3
Used other contraceptive	0/33	-	-	-
Used other prevention method	0/33	-	-	-
Partner was a faithful client	5/33	15.2	14.8	3.5 – 26.0
Partner was a regular client	2/33	6.1	6.5	0 – 14.3
Condoms take away pleasure	1/33	3.0	2.4	0 – 6.1
<b>Ever had intercourse with a client without a condom, because the client paid extra money</b>				
Yes	83/301	27.6	26.7	20.2 – 32.9
<b>Nationality of last client</b>				
Sri Lankan	300/302	99.3	99.4	98.6 – 100
Other <sup>39</sup>	1/302	0.3	0.3	0 – 1.0
Don't know	1/302	0.3	0.3	0 – 0.8
<b>Last client's HIV status</b>				
Negative	181/302	59.9	61.0	55.6 – 66.8
Positive	2/302	0.7	0.9	0 – 2.1
Don't know	119/302	39.4	38.1	32.4 – 43.3

### 8.2.10 Sexual history with non-paying (regular) partners

Very few FSW in Colombo report ever having had a regular partner (n=148/302 'never had a regular partner in my life'). Just under two thirds of FSW in Galle used a condom every time they had sex with a non-paying (regular) partner in the last 30 days, and over three quarters at their last sex with a non-paying (regular) partner (Table 39). Typically the FSW suggested the condom use (95.9%). Reasons for not using a condom focused on partner objection (43.5%) and not liking condoms (21.5%).

<sup>39</sup> Other: German (n=1)

**Table 39: Sexual history with non-paying partners, FSW Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Condom use during last 30 days</b> (among those who had a non-paying partner in the last 30 days)				
Every time	30/45	66.7	65.8	50.5 – 81.2
Almost every time	3/45	6.7	4.4	0 – 9.6
Sometimes	9/45	20.0	24.1	11.2 – 37.5
Never	3/45	6.7	5.6	0.2 – 11.0
<b>Used a condom at last sex</b>				
Yes	133/151	88.1	86.4	80.9 – 91.5
<b>Person who suggested to use a condom</b>				
Woman did	126/132	95.5	95.9	93.1 – 98.8
Partner did	6/132	4.5	4.1	1.2 – 6.9
<b>Reasons for using a condom</b> (multiple answers possible)				
To prevent HIV/STIs	77/133	57.9	57.7	50.2 – 65.4
Do not trust partner	84/133	63.2	61.1	53.3 – 68.5
Messages advising use of condoms	3/133	2.3	1.8	0.2 – 3.4
To prevent pregnancy	15/133	11.3	8.7	4.5 – 12.4
<b>Reasons for <u>not</u> using a condom</b> (multiple answers possible)				
Never heard of condoms	4/18	22.2	19.2	0.4 – 37.3
Don't know how to obtain condoms	1/18	5.6	6.6	0 – 18.9
Didn't think it was necessary	2/18	11.1	11.8	0 – 26.2
Didn't think of it	1/18	5.6	9.7	0 – 27.1
Not available	0/18	-	-	-
Too expensive	0/18	-	-	-
Partner objected	8/18	44.4	43.5	20.3 – 66.6
Don't like them	3/18	16.7	21.5	1.8 – 42.0
Used other contraceptive	0/18	-	-	-
Used other prevention method	0/18	-	-	-
Faithful partner	2/18	11.1	9.2	0 – 20.6
Regular partner	3/18	16.7	18.9	0 – 35.5
Condoms take away pleasure	1/18	5.6	4.2	0 – 11.7

### 8.2.11 Male condoms

Nearly all FSW in Galle have heard of a male condom (97.0%), have ever used one (93.3%), and know where to obtain a male condom (92.9%) (Table 40). The most commonly reported place to obtain male condoms include a private pharmacy or chemist (56.0%), a Government STD clinic (28.2%), and friends (17.4%), the same pattern is seen for main sources of condoms. Just over two-thirds (64.6%) of FSW carry condoms, and just over half (51.4%) received condoms from an NGO or a health centre in the last 12 months. Over two-thirds of FSW in Galle believe that condoms are very affordable or somewhat affordable (76.0%) and very easy or somewhat easy to obtain (84.3%).

**Table 40: Male condoms, FSW Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of a male condom</b>				
Yes	292/302	96.7	97.0	95.3 – 98.8
<b>Ever used a male condom</b>				
Yes	271/291	93.1	93.3	90.3 – 96.3
<b>Knows where to obtain male condoms</b>				
Yes	273/292	93.5	92.9	89.8 – 95.9
<b>Places where they can obtain male condoms</b> (multiple answers possible)				
Government STD clinic	82/273	30.0	28.2	23.0 – 33.1
Government non-STD clinic	14/273	5.1	5.8	2.4 – 9.2
Private clinic	2/273	0.7	0.6	0 – 1.2
Private pharmacy or chemist	158/273	57.9	56.0	48.9 – 62.8
Traditional healer/Herbalist	2/273	0.7	0.4	0 – 0.8
Neighbourhood market/Stand	17/273	6.2	8.8	4.3 – 13.7
Friends	42/273	15.4	17.4	11.6 – 23.6
Sex partner/s	4/273	1.5	1.7	0 – 3.4
Bar	4/273	1.5	1.4	0.1 – 2.8
Service Station/s	15/273	5.5	5.2	2.6 – 7.8
NGO	17/273	6.2	5.8	2.6 – 9.0
<b>Main source/s of condoms</b> (multiple answers possible)				
Government STD clinic	75/292	25.7	26.3	20.9 – 31.8
Government non-STD clinic	12/292	4.1	4.8	2.2 – 7.4
Private clinic	2/292	0.7	0.9	0 – 2.3
Private pharmacy or chemist	139/292	47.6	44.4	37.8 – 50.3
Traditional healer/Herbalist	4/292	1.4	0.9	0.2 – 1.4
Neighbourhood market/Stand	11/292	3.8	3.4	1.5 – 5.1
Friends	53/292	18.2	18.6	13.9 – 23.4
Sex partner/s	4/292	1.4	1.8	0.05 – 3.6
Bar	2/292	0.7	0.6	0 – 1.5
Service Station/s	16/292	5.5	5.0	2.7 – 7.2
NGO	25/292	8.6	7.6	4.4 – 10.6
Don't know	12/292	4.1	5.1	2.2 – 8.1
<b>Usually carries condoms</b>				
Yes	187/291	64.3	64.6	58.8 – 70.3
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>				
Yes	143/291	49.1	51.4	45.7 – 57.6
<b>Person who usually provides condoms</b>				
Never uses a condom	3/290	1.0	0.9	0 – 1.9
Woman does	204/290	70.3	71.4	66.4 – 76.4
Client does	42/290	14.5	14.3	10.2 – 18.5
Owner / Manager of the place	37/290	12.8	12.3	8.6 – 15.8
Don't know	4/290	1.4	1.1	0.1 – 2.0

Table 40: Male condoms, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Condom is affordable</b>				
Very affordable	195/290	67.2	65.0	58.1 – 71.4
Somewhat affordable	29/290	10.0	11.0	6.9 – 15.0
Not affordable	10/290	3.4	3.9	0 – 8.3
Don't know	56/290	19.3	20.2	15.5 – 25.1
<b>Condom is easy to obtain</b>				
Very easy	199/291	68.4	67.8	62.0 – 73.5
Somewhat easy	46/291	15.8	16.5	12.4 – 20.7
Not easy	10/291	3.4	3.3	1.4 – 5.3
Don't know	36//291	12.4	12.4	8.8 – 16.0

### 8.2.12 Female condoms

Few FSW in Galle have ever heard of (15.2%) or used a female condom (3.7%), and few (14.3%) would consider using one in the future (Table 41).

Table 41: Female condoms, FSW Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of a female condom</b>				
Yes	45/302	14.9	15.2	10.8 – 19.7
<b>Ever used a female condom</b>				
Yes	2/45	4.4	3.7	0 – 9.1
<b>Would consider using a female condom in the future</b>				
Yes	8/45	17.8	14.3	4.4 – 23.6
No	34/45	75.6	79.1	46.2 – 100
Don't know	3/45	6.7	6.5	0 – 43.8

### 8.2.13 Lubricant

Few FSW in Galle (10.4%) have ever heard of lubricant, and most never use lubricant (62.7%) (Table 42). Of those who have, baby oil (34.7%) and Vaseline (29.7%) are the most commonly used types of lubricant. Less than a third (18.5%) of FSW in Galle would be interested in using lubricant in the future.

Table 42: Lubricant access and use, FSW Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of lubricant</b>				
Yes	33/301	11.0	10.4	6.9– 13.8
<b>Lubricant use during vaginal or anal sex</b>				
Always	1/33	3.0	2.3	0 – 6.0
Usually	1/33	3.0	2.7	0 – 7.2
Sometimes	6/33	18.2	18.4	5.5 – 31.7
Rarely	4/33	12.1	13.8	1.4 – 25.5
Never	21/33	63.6	62.7	46.3 – 79.7

Table 42: Lubricant access and use, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Type of lubricant used</b>				
Glycerine	1/12	8.3	6.2	0 – 17.0
Saliva/Water	1/12	8.3	3.9	0 – 10.8
Vaseline	4/12	33.3	29.7	3.7 – 54.5
Baby Oil	5/12	41.7	34.7	7.9 – 59.9
Lotion	1/12	8.3	6.3	0 – 17.1
Other Oil	0/12	0	0	-
Water-Based	0/12	0	0	-
Silicone-Based	2/12	16.7	16.4	0 – 36.1
Soap	0/12	0	0	-
What I get from peer educator	0/12	0	0	-
Don't know	2/12	16.7	25.2	0 – 53.6
<b>Interested in using lubricant in the future</b>				
Yes	7/33	21.2	18.5	7.3 – 29.0
No	21/33	63.6	63.4	45.1 – 81.8
Don't know	5/33	15.2	18.1	3.5 – 33.3

#### 8.2.14 Knowledge of STI symptoms in women and men

While over two-third of FSW (71.0%) have heard of diseases that can be transmitted sexually, few (36.4%) know that it is possible to have an STI without any symptoms (Table 43). The most commonly mentioned signs of STIs in women and men are genital discharge and itching (in women: 48.3% and 32.1%, respectively; in men: 37.2% and 29.0%). Overall, less than a quarter of FSW in Galle could not mention any STI symptoms in women (14.1%) and in men (22.8%). The most commonly place where someone in the community could go for an STI treatment are Government STD clinics (63.2%).

Table 43: Knowledge of STI symptoms in women and men, FSW Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of diseases that can be transmitted sexually</b>				
Yes	217/302	71.9	71.0	65.2 – 76.4
<b>Knows it is possible to have an STI without symptoms</b>				
Yes	112/301	37.2	36.4	31.0 – 41.7
<b>Mentioned as a sign/symptom of STIs in women</b> (multiple answers possible)				
Abdominal pain	26/217	12.0	13.3	8.2 – 18.7
Genital discharge	103/217	47.5	48.3	41.8 – 55.0
Foul smelling discharge	35/217	16.1	17.5	12.0 – 23.5
Burning pain on urination	53/217	24.4	25.2	19.2 – 31.4
Genital ulcers or sores	60/217	27.6	28.3	22.2 – 34.6
Swelling in groin area	33/217	15.2	18.1	12.8 – 24.1
Itching	75/217	34.6	32.1	25.1 – 38.6
Other (thin)	1/217	0.5	0.4	0 – 1.1

Table 43: Knowledge of STI symptoms in women and men, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Does not know any symptoms of STIs in women</b> (among those who have heard of STIs)				
Yes	35/217	16.1	14.1	9.3 – 18.4
<b>Mentioned as a sign/symptom of STIs in men</b> (multiple answers possible)				
Abdominal pain	26/217	12.0	12.6	7.2 – 18.2
Genital discharge	78/217	35.9	37.2	30.6 – 44.1
Foul smelling discharge	21/217	9.7	10.7	5.4 – 16.2
Burning pain on urination	41/217	18.9	19.7	13.7 – 25.9
Genital ulcers or sores	56/217	25.8	28.3	22.4 – 34.8
Swelling in groin area	33/217	15.2	18.7	12.6 – 25.2
Itching	63/217	29.0	29.0	22.8 – 35.1
<b>Does not know any symptoms of STIs in men</b> (among those who have heard of STIs)				
Yes	58/217	26.7	22.8	17.1 – 27.7
<b>Places where someone from the community who has an STI can get treatment</b> (multiple answers possible)				
Ayurvedic physician	4/302	1.3	1.5	0 – 3.1
Pharmacy	7/302	2.3	3.4	0.6 – 6.3
Private clinic	30/302	9.9	10.5	6.9 – 14.3
Government STD clinic	192/302	63.6	63.2	57.1 – 69.2
Government clinic or hospital (non-STD)	59/302	19.5	20.0	15.1 – 25.0
Don't know	30/302	9.9	8.8	5.6 – 11.7

### 8.2.15 Patterns of STI care seeking

Few FSW had a doctor confirm an STI (5.7%), or have self-reported discharge (1.2%) or ulcer/sore (0.7%) in the last 12 months (1.2%), but of those who did, all reported seeking treatment (Table 44). The most commonly sought place for STI treatment are the Government STD clinics (80.1%), with the reasons for choosing these locations being affordability (47.5%) and confidentiality (20.4%). Nearly two thirds (63.9%) of FSW in Galle told the provider that they exchange sex for money and most were satisfied with the treatment they received (very satisfied: 57.2%; somewhat satisfied: 31.2%).



**Table 44: Practices of STI care seeking, FSW Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Doctor confirmed STI in the last 12 months</b>				
Yes	14/216	6.5	5.7	3.0 – 8.2
<b>STI symptoms (<u>discharge</u>) in the last 12 months</b>				
Yes	4/302	1.3	1.2	0.3 – 2.1
<b>Sought treatment for <u>discharge</u></b>				
Yes	4/4	100	100	-
<b>STI symptoms (<u>sore or ulcer</u>) in the last 12 months</b>				
Yes	2/302	0.7	0.7	0 – 1.4
<b>Sought treatment for <u>sore or ulcer</u></b>				
Yes	2/2	100	100	-
<b>Places where STI treatment (for discharge, sore, or ulcer) was sought</b> (multiple answers possible)				
Government STD clinic	4/5	80.0	80.1	48.5 – 100
Government non-STD clinic	0/5	-	-	-
Private clinic	1/5	20.0	19.9	0 – 52.6
Private pharmacy or chemist	0/5	-	-	-
Traditional healer/Herbalist	0/5	-	-	-
Medicine or herbs from home	0/5	-	-	-
<b>Reasons for choosing this/these places</b> (multiple answers possible)				
Confidentiality	1/5	20.0	20.4	0 – 52.8
Affordability	2/5	40.0	47.5	6.4 – 90.3
Recommendation by friend or acquaintance	1/5	20.0	16.7	0 – 44.5
Quality and/or specialized care given at this place	0/5	-	-	-
Knows the caregivers	0/5	-	-	-
Known friendliness of the caregivers	0/5	-	-	-
Proximity/Location	0/5	-	-	-
Other (free)	1/5	20.0	16.3	0 – 43.6
<b>Told health care provider that they exchange sex for money last time they received STI treatment or diagnosis</b>				
Yes	10/16	62.5	63.9	41.6 – 86.2
<b>Satisfaction with treatment from health care provider during last visit for STI treatment</b>				
Very satisfied	9/16	56.3	57.2	33.9 – 80.9
Somewhat satisfied	5/16	31.3	31.2	9.1 – 53.3
Not satisfied	2/16	12.5	11.6	0 – 25.2

## 8.2.16 HIV information and personal risk perception

Over three quarters (78.9%) of FSW in Galle have heard of HIV / AIDS, but more than a quarter have never discussed it with any sexual partner (25.5%) (Table 45). The most common sources of HIV/AIDS information are NGOs (44.4%), television (14.4%), and health services (14.1%). More than half of FSW in Galle (52.8%) believe they are at no risk for HIV, with the main reason for this being that they always use condoms (61.9%) and they trust their partners (49.2%). Among those who said they are at high risk (19.3%), the main reasons were that they had many sexual partners (59.9%) and didn't always use condoms (32.6%). Also, among those who said they were at high risk (n=62), nearly all (n=58) used a condom at last sex with a client (data not shown). Furthermore, of the 4 HIV positive FSW in Galle, only one perceived their result at the IBBS site to be negative, and the other three already knew they were positive (data not shown).

**Table 45: Information and personal risk perception, FSW Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of HIV/AIDS</b>				
Yes	235/302	77.8	78.9	74.4 – 83.7
<b>Main source of the most thorough information about HIV/AIDS</b>				
School	6/234	2.6	2.1	0.5 – 3.7
Health services	36/234	15.4	14.1	8.9 – 19.1
Workplace	2/234	0.9	0.8	0 – 1.9
Friends/Family	21/234	9.0	10.4	5.8 – 15.2
Television	32/234	13.7	14.4	9.3 – 19.7
Newspaper/Magazines	16/234	6.8	6.9	3.3 – 10.4
Posters/Billboards	8/234	3.4	4.0	1.3 – 6.7
Pamphlets/Leaflets	0/234	-	-	-
Radio	5/234	2.1	2.9	0.3 – 5.5
NGOs	108/234	46.2	44.4	36.7 – 51.9
<b>Discussed HIV/AIDS with any sexual partner</b>				
Yes, all	32/234	13.7	14.1	9.3 – 18.9
Yes, some	139/234	59.4	60.2	53.5 – 67.0
No, none	62/234	26.5	25.5	19.6 – 31.3
Don't know	1/234	0.4	0.2	0 – 0.6
<b>Sexual partner/s told them their HIV status</b>				
Yes, all	19/171	11.1	10.4	5.4 – 15.2
Yes, some	127/171	74.3	75.8	69.4 – 82.6
No, none	25/171	14.6	13.8	8.3 – 19.0
<b>Knows somebody who is HIV-positive or has died of AIDS</b>				
Yes	97/235	41.3	43.5	37.0 – 50.5
<b>Close friend or relative died of HIV/AIDS</b>				
Yes, close relative	4/97	4.1	4.0	0.5 – 7.4
Yes, close friend	16/97	16.5	18.4	8.9 – 27.9

Table 45: Information and personal risk perception, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Perception of personal HIV risk</b>				
No risk	157/301	52.2	52.8	46.3 – 59.4
Small risk	46/301	15.3	15.5	11.2 – 19.7
Moderate risk	20/301	6.6	7.2	3.8 – 10.7
High risk	62/301	20.6	19.3	14.2 – 24.0
Don't know	16/301	5.3	5.4	2.9 – 7.9
<b>Reasons for believing they are at risk of contracting HIV</b> (among those who said they were at risk)				
Many sexual partners	74/128	57.8	59.9	51.9 – 68.3
Didn't always use condoms	45/128	35.2	32.6	24.6 – 40.2
Injected drugs	0/128	-	-	-
Partner has other partners	8/128	6.3	5.9	2.2 – 9.4
Don't know	1/128	0.8	1.6	0 – 4.2
<b>Reasons for believing they are not at risk of contracting HIV</b> (among those who said they were not at risk) (multiple answers possible)				
Trust my partner/s	76/157	48.4	49.2	40.6 – 57.7
Always use condoms	100/157	63.7	61.9	52.8 – 70.8
Don't know	1/157	0.6	0.4	0 – 1.0

### 8.2.17 Knowledge of HIV and AIDS

Knowledge of HIV and AIDS amongst FSW in Galle is mixed, with better knowledge around some individual indicators such as knowing that HIV transmission can be reduced by having sex with only one uninfected partner (81.2%) and that persons can reduce the risk of HIV infection by using a condom every time they have sex (78.5) (Table 46). However, other indicators were noticeably lower, resulting in an overall composite HIV / AIDS knowledge indicator at only 28.0%. Furthermore, while over two thirds (68.2%) know that HIV can be transmitted from a mother to her child, only a third have ever heard of ART (33.0%).

Table 46: Knowledge of HIV and AIDS, FSW Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners</b>				
Yes	244/302	80.8	81.2	76.3 – 86.2
<b>Person can reduce the risk of getting HIV by using a condom every time he/she has sex</b>				
Yes	240/302	79.5	78.5	73.7 – 83.2
<b>Healthy-looking person can have HIV</b>				
Yes	203/302	67.2	66.2	60.8 – 71.4
<b>Person can get HIV from mosquito bites</b>				
No	179/302	59.3	56.4	50.3 – 62.0

Table 46: Knowledge of HIV and AIDS, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Person can get HIV by sharing food with someone who is infected</b>				
No	178/301	59.1	57.3	51.7 – 62.7
<b>Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission</b>				
Yes	84/301	27.9	28.0	22.7 – 33.3
<b>GARPR Knowledge Composite Indicator without GARP4 (mosquito question)</b>				
Yes	254/604	42.1	40.2	35.4 – 44.7
<b>HIV can be transmitted from mother to her unborn child</b>				
Yes	209/302	69.2	68.2	62.5 – 73.8
No	61/302	20.2	20.3	15.5 – 25.0
Don't know	32/302	10.6	11.5	7.5 – 15.7
<b>Ever heard of ART</b>				
Yes	99/300	33.0	33.0	26.6 – 39.4

### 8.2.18 Stigma related to HIV and AIDS

Stigma amongst FSW in Galle is elevated, given that while two thirds of FSW would care for an HIV positive family member (66.4%), just over half believe an HIV positive student should not be allowed to go to school (54.9%), less than half would buy food from an HIV positive food seller (41.0%), and nearly two thirds would keep a family member's positive HIV status confidential (Table 47).

Table 47: Stigma related to HIV, FSW Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Agrees to take care of an HIV positive family member at home</b>				
Yes	204/301	67.8	66.4	60.0 – 72.6
<b>Agrees that an HIV positive student should be allowed to continue attending a school</b>				
Yes	162/301	53.8	54.9	49.2 – 60.7
<b>Agrees to buy food from an HIV positive food seller</b>				
Yes	122/301	40.5	41.0	35.1 – 46.8
<b>Thinks that, if a family member becomes HIV positive, his/her HIV status should remain confidential</b>				
Yes	186/301	61.8	62.9	57.2 – 69.0

### 8.2.19 HIV testing

Although two thirds of FSW in Galle know where an HIV test can be obtained (67.0%), only less than half have ever had an HIV test (40.1%) and less than a quarter (22.1%) had a test in the last 12 months and received the results (Table 48). Almost all HIV tests were done at Government STD clinics (96.1%), and over three quarters of those (76.6%) were satisfied or very satisfied with the service received from providers. Furthermore, nearly all (96%) told the provider they were FSW. All three FSW who reported to have received a positive result from their last HIV test used condoms at last sex, and all four who tested positive at the IBBS site used a condom at last sex (data not shown). Also, of the four FSW who were HIV positive in Galle, only one perceived their HIV status to be negative (data not shown).

**Table 48: HIV testing, FSW Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Knows where HIV testing can be obtained</b>				
Yes	199/302	65.9	67.0	60.3 – 74.0
<b>Ever tested for HIV</b>				
Yes	127/302	42.1	40.1	34.0 – 45.8
<b>The test was voluntary</b>				
Yes	98/127	77.2	74.1	65.3 – 82.4
<b>Site where last testing for HIV took place</b>				
Government STD Clinic	123/127	96.9	96.1	90.5 - 100
Government non-STD Clinic	1/127	0.8	1.7	0 – 5.4
Private Clinic	3/127	2.4	2.2	0.06 – 4.4
Private Pharmacy or Chemist	0/127	-	-	-
<b>Reasons for <u>never</u> getting an HIV test</b> (multiple answers possible)				
Don't know where to go	77/175	44.0	43.4	37.8 – 51.8
Always use condoms	42/175	24.0	27.3	20.5 – 34.6
Not at risk of getting HIV	38/175	21.7	21.4	15.2 – 27.5
Didn't have time/Too busy	33/175	18.9	19.6	13.3 – 26.1
I trust my partner	7/175	4.0	4.0	0.9 – 7.0
Afraid of knowing I may be HIV positive	3/175	1.7	1.8	0 – 4.4
Lack of confidentiality	10/175	5.7	5.7	2.3 – 9.1
Inconvenient testing location	7/175	4.0	4.5	1.4 – 7.7
No money	1/175	0.6	1.1	0 – 2.9
Don't know	2/175	1.1	1.0	0 – 2.4
<b>Time since last HIV test</b>				
≤ 1 year	93/127	73.2	73.2	65.3 – 81.2
> 1 year	30/127	23.6	23.6	16.0 – 31.3
Don't know	4/127	3.1	3.1	0 – 6.4
<b>Knows result of last HIV test</b>				
Yes	97/127	76.4	73.9	64.1 – 83.1
<b>Tested for HIV in the past 12 months and knows result</b>				
Yes (among those who tested)	72/123	58.5	56.9	45.3 – 68.1
Yes (among all)	72/302	23.8	22.1	17.1 – 26.7

Table 48: HIV testing, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for the last HIV test</b> (multiple answers possible)				
Wanted to know my HIV status	114/127	89.8	89.2	83.6 – 94.7
My partner asked me to get tested	1/127	0.8	1.1	0 – 2.7
Wanted to start sexual relations with a new partner	1/127	0.8	1.7	0 – 4.1
Wanted to get married	0/127	-	-	-
Need for loan/insurance coverage	0/127	-	-	-
Employer requested the test	8/127	6.3	5.9	1.7 – 9.9
Felt sick	0/127	0	0	-
Advised by health worker	2/127	1.6	1.3	0 – 3.0
Advised by peer educator	1/127	0.8	0.6	0 – 1.7
Pregnant	0/127	-	-	-
Other (NGO)	2//127	1.6	1.6	0 – 3.8
<b>Result of last HIV test</b>				
HIV-negative	114/123	89.8	94.5	91.6 – 97.7
HIV-positive	3/123	2.4	2.1	0 – 4.1
Indeterminate	0/123	-	-	-
Did not get the result	4/123	3.1	2.5	0.4 – 4.4
Don't know	2/123	1.6	1.0	0 – 2.2
<b>Reason for not getting last HIV test result</b>				
Didn't have time/Too busy	2/4	50.0	45.1	0 – 90.4
Not infected	1/4	25.0	25.6	0 – 62.4
Too scared	0/4	-	-	-
Testing centre didn't have result	1/4	25.0	29.3	0 – 73.8
<b>Perception of current HIV status</b>				
HIV-negative	212/302	70.2	71.2	66.2 – 76.3
HIV-positive	5/302	1.7	1.5	0.3 – 2.7
Don't know	85/302	28.1	27.3	22.2 – 32.2
<b>Satisfaction with quality of services provided during last HIV testing</b>				
Very satisfied	50/127	39.4	40.9	25.2 – 57.1
Satisfied	49/127	38.6	35.7	18.0 – 52.8
A little satisfied	15/127	11.8	13.1	5.6 – 20.9
Not satisfied	11/127	8.7	9.1	3.7 – 14.6
Don't know	2/127	1.6	1.1	0 – 2.2
<b>Told health care provider or counsellor that they exchange sex for money at last HIV testing</b>				
Yes	119/126	94.4	96.0	93.8 – 98.6

Table 48: HIV testing, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for not telling health care provider or counsellor they exchange sex for money</b> (multiple answers possible)				
Afraid of discrimination/Not providing testing	2/7	28.6	43.9	8.6 – 84.4
Afraid provider would tell police/legal authorities	0/7	-	-	-
It was not necessary to discuss Afraid provider would not keep information confidential	1/7	14.3	8.7	0 – 20.8
Little or no contact/interaction with counsellor/provider	1/7	14.3	15.3	0 – 40.5
Shy/Embarrassed	0/7	-	-	-
Provider already knew	3/7	42.9	32.1	0.4 – 60.1
0/7	0/7	-	-	-
<b>Felt that health care provider or counsellor reacted in a negative or discriminatory way because they exchange sex for money</b>				
Yes	10/119	8.4	9.0	4.1 – 14.1
<b>Health care provider or counsellor's behaviour</b> (multiple answers possible)				
It was uncomfortable	7/10	70.0	80.2	60.5 – 100
Stopped talking to me	1/10	10.0	7.9	0 – 23.0
Asked me to leave	1/10	10.0	8.3	0 – 23.1
Verbally abused or scolded me	3/10	30.0	19.2	0 – 39.8

### 8.2.20 Experience of stigma, discrimination and violence

Experiences of stigma, discrimination and violence are varied, with less than ten percent of FSW being refused healthcare (4.6%), or being physically (5.7%) or sexually assaulted (3.5%) (Table 49). However, over ten percent have been refused police assistance (12.4%) or verbally insulted (15.6%). Of the nine women who report sexual assault, the last abuser was typically a social acquaintance (n=5, 55.6%). Only one respondent each sought medical assistance and reported the incident to the police.

Table 49: Experience of stigma, discrimination and violence, FSW Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Has been refused health care because someone believed they sold sex to men</b>				
Yes	14/300	4.7	4.6	2.3 – 6.9
<b>Has been refused police assistance because someone believed they sold sex to men</b>				
Yes	39/301	13.0	12.4	8.3 – 16.3

Table 49: Experience of stigma, discrimination and violence, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Has been verbally insulted because someone believed they sold sex to men</b>				
Yes	49/301	16.3	15.6	11.2 – 19.8
<b>Has been hit, kicked, or beaten because someone believed they sold sex to men</b>				
Yes	19/300	6.3	5.7	3.1 – 8.2
<b>Has been sexually assaulted or raped</b>				
Yes	9/300	3.0	3.5	0.9 – 6.2
<b>Type of abuser last time they were sexually assaulted or raped</b>				
Unknown person	1/9	11.1	18.4	0 – 50.9
Social acquaintance	5/9	55.6	50.3	16.3 – 83.0
Family member/Relative	1/9	11.1	8.3	0 – 23.1
Police	0/9	0	0	-
Client	1/9	11.1	12.8	0 – 35.9
Other sex worker	1/9	11.1	10.2	0 – 27.2
Pimp	0/9	-	-	-
Non-paying partner or boyfriend	0/9	-	-	-
<b>Sought medical treatment after sexual assault/rape</b>				
Yes	1/9	11.1	19.2	0 – 50.7
<b>Reported sexual assault/rape to the police</b>				
Yes	1/9	11.1	8.0	0 – 22.9

### 8.2.21 Health care utilization and pregnancy

Less than a third (29.0%) of FSW in Galle sought medical care in the last 12 months, of those who did a small number had difficulty (2.5%), most notably not being able to take time off work (62.6%). Less than ten percent are currently pregnant, but nearly a quarter have given birth in the last five years.

Table 50: Experience of healthcare and pregnancy, FSW Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Sought medical care for any reason during last 12 months</b>				
Yes	88/301	29.2	29.0	23.3 – 34.8
<b>Had difficulty getting medical care during last 12 months</b>				
Yes	2/88	2.3	2.5	0 – 5.5
<b>Type of difficulty</b> (multiple answers possible)				
Too expensive	0/2	-	-	-
Too far away	0/2	-	-	-
Could not take time from work	1/2	50.0	62.6	-
Long waiting times	1/2	50.0	38.5	-



Table 50: Experience of healthcare and pregnancy, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Currently pregnant</b>				
Yes	13/302	4.3	5.8	2.8 – 9.3
<b>Gave birth in the last 5 years</b>				
Yes	68/302	22.5	22.7	17.6 – 27.6

### 8.2.22 Programme coverage

Less than a quarter (13.6%) of FSW in Galle had contact with a peer educator in the last six months, and those who did, were in contact between one and six times, and mostly received general HIV and STI information (93.6%) and condoms (77.3%). Just over two fifths (42.2%) of FSW in Colombo have been reached according to the GARP prevention programmes indicator, which is a composite indicator of having received free condoms in the last 12 months, and know where to go for an HIV test.

Table 51: Programme coverage, FSW Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Contact with a health peer educator in the community in the last 6 months</b>				
Yes	45/302	14.9	13.6	9.8 – 17.1
<b>Number of times of contact with a health peer educator in the last 6 months</b>				
1	9/45	20.0	15.7	6.2 – 24.1
2	17/45	37.8	39.0	23.9 – 54.4
≥ 3	13/45	28.9	32.5	19.0 – 47.0
Don't know	6/45	13.3	12.8	2.5 – 22.9
<b>Services or information received from the health peer educator</b>				
General HIV/STI prevention /transmission information	42/45	93.3	93.6	87.6 – 99.6
Condoms	33/45	73.3	77.3	67.3 – 88.1
Referral for STI treatment	1/45	2.2	2.1	0 – 5.4
Referral for VCT	0/45	-	-	-
Medical visit	0/45	-	-	-
<b>Reached with HIV prevention programs</b> (received free condoms in the last 12 months and know where HIV testing can be obtained)				
Yes	122/301	40.5	42.2	35.9 – 48.9

Bivariate analysis shows that 'other' FSW are more in touch with peer educators (64.6%) than street based (17.9%) and massage parlour based (15.4%) (Table 52).

Bivariate analysis shows that FSW who use internet, chat or SMS to find clients are more in touch with peer educators (25.6%) than street-based (17.9%) and massage parlour-based (15.4%) FSW (Table 52).

**Table 52: Programme coverage crosstabs**

Places where they normally find clients	Number of times of contact with a health peer educator in the last 6 months			Total N (%)
	1 n (%)	2 n (%)	≥ 3 n (%)	
Internet, chat, SMS	2 (22.2)	4 (23.5)	4 (30.8)	10 (25.6)
Street park, or public transport	1 (11.1)	3 (17.6)	3 (23.1)	7 (17.9)
Massage parlour, Spa or Salon	1 (11.1)	1 (5.9)	4 (30.8)	6 (15.4)
Hotel	2 (11.1)	3 (17.6)	1 (7.7)	6 (15.4)
Brothel	0 (0)	1 (5.9)	0 (0)	1 (2.6)
Other	3 (33.3)	6 (35.3)	1 (7.7)	10 (25.6)
<b>Total</b>	<b>9 (100)</b>	<b>17 (100)</b>	<b>13 (100)</b>	<b>39 (100)</b>

### 8.2.23 Alcohol and drug use

Less than a third of FSW in Galle have ever had a drink of alcohol, and of those who have, nearly half have not had a drink in the last four weeks (44.1%) (Table 53). There is no reported injecting drug use in the last 12 months amongst FSW in Galle. Furthermore, there is minimal drug use of any kind amongst FSW in Galle, with most FSW never having tried heroin (97.3%), cannabis (99.4%), cocaine (100.0%), ecstasy (100.0%), amphetamines (100.0%), opium (100.0%), and hashish (100.0%).

**Table 53: Alcohol and drug use, FSW Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever consumed alcohol</b>				
Yes	89/298	29.9	29.1	23.5 – 34.6
<b>Alcohol consumption in the last 4 weeks</b>				
Never drink alcohol	1/89	1.1	1.6	0 – 4.9
Never in the last 4 weeks	43/89	48.3	42.5	31.2 – 52.6
Once a week	17/89	19.1	21.7	13.4 – 30.8
Less than once a week	19/89	21.3	25.2	14.8 – 36.2
Every day	9/89	10.1	9.0	3.2 – 14.7
<b>Injected drugs in the last 12 months</b>				
Yes	0/302	-	-	-

Table 53: Alcohol and drug use, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heroin</b>				
Didn't use it in the last 6 months	2/298	0.7	0.4	0 – 0.9
Once a month or less	0/298	-	-	-
Several times a month	1/298	0.3	0.5	0 – 1.1
2-4 times a month	0/298	-	-	-
2-3 times a week	3/298	1.0	1.0	0.2 – 1.9
≥ 4 times a week	2/298	0.7	0.7	0 – 1.7
Have never used	290/298	97.3	97.3	95.8 – 98.9
<b>Cannabis</b>				
Didn't use it in the last 6 months	1/297	0.3	0.09	0 – 0.2
Once a month or less	0/297	-	-	-
Several times a month	0/297	-	-	-
2-4 times a month	1/297	0.3	0.5	0 – 1.1
2-3 times a week	0/297	-	-	-
≥ 4 times a week	0/297	-	-	-
Have never used	295/297	99.3	99.4	98.8 – 100
<b>Cocaine</b>				
Didn't use it in the last 6 months	0/294	-	-	-
Once a month or less	0/294	-	-	-
Several times a month	0/294	-	-	-
2-4 times a month	0/294	-	-	-
2-3 times a week	0/294	-	-	-
≥ 4 times a week	0/294	-	-	-
Have never used	294/294	100	100	-
<b>Ecstasy</b>				
Didn't use it in the last 6 months	0/293	-	-	-
Once a month or less	0/293	-	-	-
Several times a month	0/293	-	-	-
2-4 times a month	0/293	-	-	-
2-3 times a week	0/293	-	-	-
≥ 4 times a week	0/293	-	-	-
Have never used	293/293	100	100	-
<b>Amphetamines</b>				
Didn't use it in the last 6 months	0/293	-	-	-
Once a month or less	0/293	-	-	-
Several times a month	0/293	-	-	-
2-4 times a month	0/293	-	-	-
2-3 times a week	0/293	-	-	-
≥ 4 times a week	0/293	-	-	-
Have never used	293/293	100	100	-

Table 53: Alcohol and drug use, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Opium</b>				
Didn't use it in the last 6 months	0/291	-	-	-
Once a month or less	0/291	-	-	-
Several times a month	0/291	-	-	-
2-4 times a month	0/291	-	-	-
2-3 times a week	0/291	-	-	-
≥ 4 times a week	0/291	-	-	-
Have never used	291/291	100	100	-
<b>Hashish</b>				
Didn't use it in the last 6 months	0/292	-	-	-
Once a month or less	0/292	-	-	-
Several times a month	0/292	-	-	-
2-4 times a month	0/292	-	-	-
2-3 times a week	0/292	-	-	-
≥ 4 times a week	0/292	-	-	-
Have never used	292/292	100	100	-

### 8.2.24 Media usage

Amongst FSW in Galle, over two thirds of respondents watch TV (68.7%) and listen to the radio (67.0%) at least once a week or more; however, reading the newspaper is far less at only 36.8% and internet usage is almost non-existent at 3.1% (Table 54). More than two thirds of respondents have a mobile phone (77.6%), use it to communicate with other FSW (84.6%), and would be interested in receiving messages about HIV and health related topics (76.3%).

Table 54: Media usage, FSW Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Radio</b>				
Never	86/302	28.5	27.2	21.8 – 32.3
Once a month	14/302	4.6	4.7	2.3 – 7.2
Once a week	18/302	6.0	6.8	3.5 – 10.3
Most days	92/302	30.5	30.4	25.2 – 35.6
Every day	92/302	30.5	30.9	25.4 – 36.5
<b>TV</b>				
Never	89/302	29.5	28.2	22.8 – 33.3
Once a month	10/302	3.3	3.1	0.4 – 5.9
Once a week	17/302	5.6	6.1	3.4 – 9.0
Most days	96/302	31.8	33.3	27.4 – 39.5
Every day	90/302	29.8	29.3	24.0 – 34.4
<b>Newspaper</b>				
Never	186/302	61.6	64.7	59.0 – 71.0
Once a month	4/302	1.3	1.5	0.1 – 2.8
Once a week	34/302	11.3	11.8	7.6 – 16.1
Most days	57/302	18.9	16.2	11.8 – 20.1
Every day	20/302	6.6	5.5	3.1 – 7.7
Don't know	1/302	0.3	0.3	0 – 0.8

Table 54: Media usage, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Internet</b>				
Never	291/302	96.4	95.9	93.0 – 98.8
Once a month	0/302	-	-	-
Once a week	2/302	0.7	0.6	0 – 1.2
Most days	5/302	1.7	1.5	0.2 – 2.7
Every day	2/302	0.7	1.4	0 – 4.0
Don't know	2/302	0.7	0.5	0 – 1.3
<b>Has a mobile phone</b>				
Yes	237/302	84.4	77.6	73.0 – 82.0
<b>Uses mobile phone to communicate with other FSW</b>				
Yes	200/237	78.5	84.6	80.5 – 88.7
<b>Interested in receiving HIV and health-related text messages</b>				
Yes	180/237	75.9	76.3	70.6 – 82.1
<b>Interested in attending learning activities</b>				
Yes	215/302	71.2	69.2	62.7 – 75.3

### 8.2.25 Network size and multiplier questions

FSW in Galle estimate the average number of FSW living in Galle to be 1,196, of whom an estimated average of 1,118 are above the age of 18 (Table 55). With regard to multiplier questions, just under one third (31.5%) of FSW have been treated at a STD clinic in 2014, and the data presented in the Table 55 would ideally have been used by the NSACP programme to undertake multiplier method for PSE, by cross referencing existing STD clinic routine data. As described earlier, this was not feasible due to limited information around catchment areas for clinic attendees. This is described further in the limitation section of this report.

Table 55: Network size and multiplier questions, FSW Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Estimation of the number of FSW who live in Galle</b>	290/302			
Mean	1272.1	-	1196.2	-
SD	603.8	-	560.2	-
Median	1200.0	-	1000.0	-
Range	5 – 4000	-	-	-
<b>Estimation of the number of FSW older than 18 who live in Galle</b>	274/302			
Mean	1196.8	-	1118.7	-
SD	565.7	-	527.3	-
Median	1012.5	-	977.5	-
Range	5 – 3250	-	-	-

Table 55: Network size and multiplier questions, FSW Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of FSW older than 18 seen in the last month* (network size question)</b>				
Mean	5.27	-	4.29	-
SD	2.85	-	2.24	-
Median	5.0	-	4.0	-
Range	1 – 22	-	-	-
<b>Tested for HIV at Government STD (NSACP) clinic in 2014</b>				
Yes	64/302	21.2	20.1	15.0 – 25.1
<b>Names of NSCAP clinics visited in 2014<sup>40</sup></b>				
STD clinic – Galle	47/302	15.6	14.4	10.0 – 18.6
STD clinic – Balapitiya	9/302	3.0	3.6	1.1 – 6.1
STD clinic – Colombo	7/302	2.3	2.0	0.4 – 3.5
STD clinic - Kalutara	1/302	0.3	0.2	0 – 0.5

### 8.3 Kandy

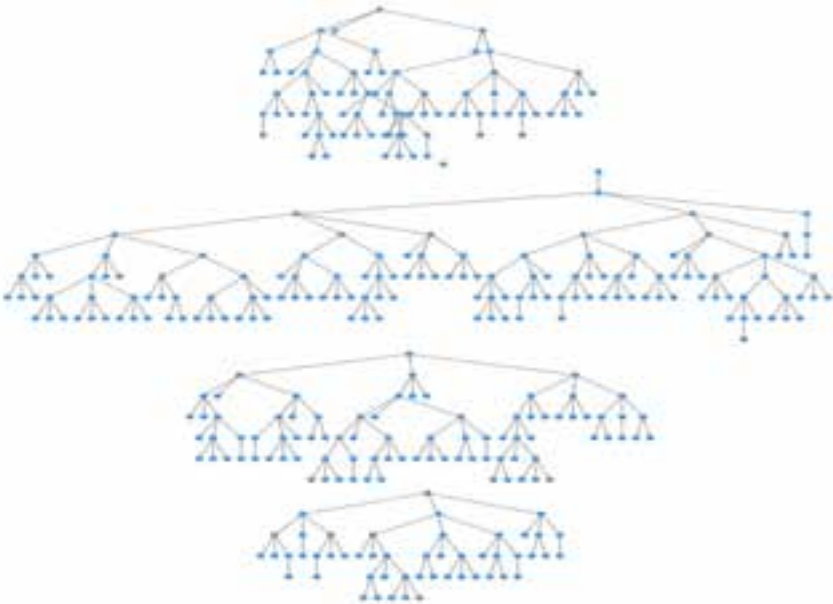
In Kandy a total of 354 participants were recruited, including five seeds. In RDS-A the Gile's SS estimator was used, with population size estimate of 2,204 (low estimate of 709, and high estimate of 3,699), 0.95 confidence interval and 5000 bootstraps.

#### 8.3.1 Network properties

In Figure 9 the recruitment tree for FSW in Kandy is illustrated, showing that four of the five seeds successfully recruited, with most participants coming from one seed. A maximum of eight waves was reached. Two participants reported network sizes of 350 and 720 FSW, respectively. Their network sizes were lowered to 20, the 99th percentile value. Furthermore, 17 participants (4.8%) did not report a network size, and were imputed with the median value of 5. The strength of the association between the network size question in the questionnaire and the separate network size form completed by the coupon manager, one month in to data collection was moderately strong,  $r = .53$  ( $p < .01$ ).

<sup>40</sup> Among 100 participants who said they tested for HIV at an NSSCP clinic, 99 (99.0%) also provided the name of the clinic and date of testing. Among them, 35 (35.4%) visited the clinic before 2014, and the remaining 64 participants in 2014.

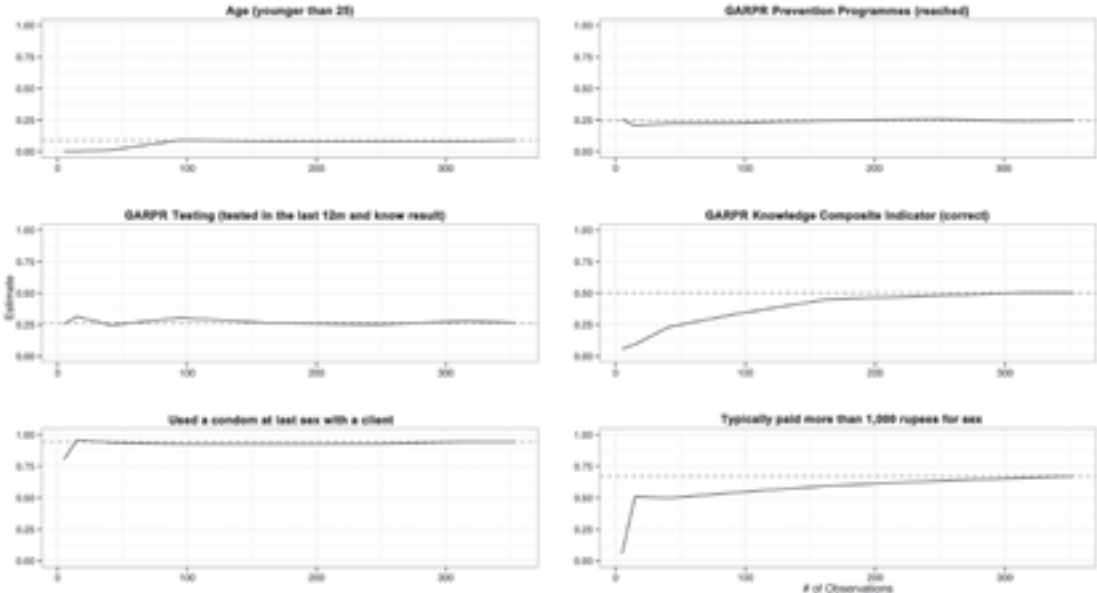
**Figure 9: Recruitment tree, FSW Kandy**



**8.3.2 Convergence**

Convergence was reached on all key indicators; however, two indicators show less convergence (GARP knowledge and typical amount of money per client), as the converging line is close to the population estimates for those indicators and the sample size has been reached, it does not have an impact on the results interpretation (Figure 10).

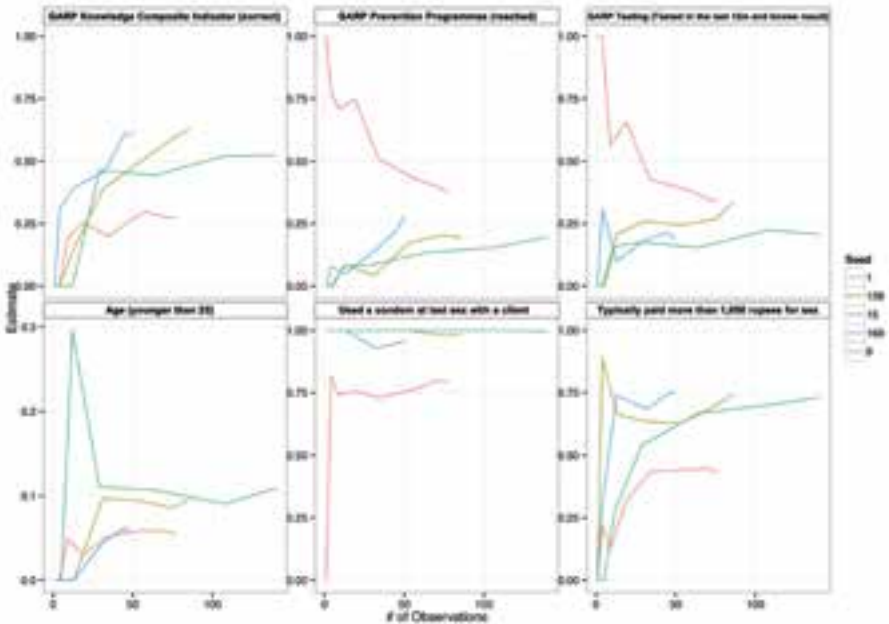
**Figure 10: Convergence on key indicators, FSW Kandy**



**8.3.3 Bottleneck plots**

There is some evidence of bottlenecks amongst FSW in Kandy (Figure 11). For example, seed ID=1 has reached FSW with lower knowledge and who receive less money per client. The difference is not of importance for the interpretation, because of small number of recruits from that seed.

**Figure 11: Bottleneck plots, FSW Kandy**



**8.3.4 Homophily**

Homophily amongst FSW in Kandy ranges between 0.74 to 1.25, which is reasonable, showing minimal bias in recruitment patterns (Table 56).

**Table 56: Homophily, FSW Kandy**

Indicator	Recruitment homophily	Estimated population homophily
HIV	-	-
Active syphilis	-	-
Used a condom at last sex with a client	1.00	0.74
Received free condoms from NGOs or a health care centre in the last 12 months and know where to obtain an HIV test	1.28	1.15
Correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	1.21	1.25
Tested for HIV in the past 12 months and knows result	1.06	1.06

**8.3.5 Study and recruiter information**

The main reason for participation in the IBBS survey, amongst FSW in Kandy, is similar to the other FSW groups, for the HIV test (81.6%) and interest in HIV and sexual health (12.7%) (Table 57). All coupons were obtained from a friend or acquaintance, and the screener was confident that all respondents were true FSW, satisfying completely the requirements for RDS recruitment.



**Table 57: Study and recruiter information, FSW Kandy**

Characteristic	Sample proportions	
	n/N	%
<b>Main reason for participation in the study</b>		
Interest in HIV and sexual health	45/354	12.7
HIV test	289/354	81.6
Interest in issues related to FSW	11/354	3.1
Helping the community	0/354	0
Friend wanted me to participate	7/354	2.0
Someone forced me	0/354	-
Incentive/Gift	2/354	0.6
<b>Mode of receiving the coupon</b>		
From a friend/acquaintance	349/349 <sup>41</sup>	100
Found it	0/349	-
Bought it/Exchanged it for something	0/349	-
<b>Length of time they knew the person who gave them the coupon</b>		
< 6 months	181/349	51.9
6 months – 1 year	78/349	22.3
> 1 year	89/349	25.5
Don't know	1/349	0.3
<b>Screener's confidence that participant is FSW</b>		
Confident	354/354	100
Somewhat confident	0/354	-
Not confident	0/354	-

### 8.3.6 Biological test results

The HIV and syphilis prevalence amongst FSW in Kandy is 0%, with not one positive sample amongst all 354 respondents (Table 58).

**Table 58: Biological test results, FSW Kandy**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
HIV	0/354	-	-	-
Syphilis – Active	0/354	-	-	-
Syphilis – Non-Active	0/354	-	-	-
Syphilis (active and non-active)	0/354	-	-	-

### 8.3.7 Socio-demographic characteristics

The average age of FSW in Kandy is 34.6 years (Table 59). All respondents (100.0%) identified as female, with same sex at birth, and born in Sri Lanka. Most of the FSW in Kandy are Sinhalese (93.5%), followed by Tamil (4.6%). Nearly three quarters (75.5%) have had Kandy as their district of residence during the past one year. Over three quarters of FSW in Kandy (87.2%) are literate, although only 45.8% have completed high school (passed O Levels). Over half (58.2%) of FSW in Galle earn between 10,000 and 40,000 rupees a month and nearly all (94.8%) are supporting anywhere between one and nine. Less than half (42.3%) have other employment in addition to sex

<sup>41</sup> Seeds not included as these coupons were purposefully distributed by the IBBS survey team

work, with the occupations following the same trends as in the other districts, with hairdresser/beautician/masseuse at 62.1%, followed by business owner/self employed (14.3%).

A FSW in her forties, who works as a peer educator based in Kandy, mentioned that quite a few FSW are educated and able to read and write. She herself has been abroad to a number of countries in the Middle East such as Amman and Saudi, and spent around 10 years abroad. Two hotel-based FSW of 34 and 35 years of age in Kandy, said they also work in Colombo and two other locations in Sri Lanka.

**Table 59: Socio-demographic characteristics, FSW Kandy**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Age</b>				
Mean	34.6	-	34.6	-
SD	8.8	-	8.6	-
Median	33.0	-	33.0	-
Range	19 – 65	-	-	-
<b>Age groups</b>				
Aged under 20	5/354	1.4	1.3	0 – 2.6
Aged under 25	31/354	8.8	8.7	5.2 – 12.2
18 – 24	31/354	8.8	8.7	5.2 – 12.2
25 – 34	170/354	48.0	48.8	42.3 – 55.6
35 – 44	107/354	30.2	30.0	24.6 – 35.3
≥ 45	46/354	13.0	12.5	8.3 – 16.6
<b>Sex</b>				
Female	354/354	100	100	-
<b>Sex same as at birth</b>				
Yes	354/354	100	100	-
<b>Citizenship</b>				
Sri Lankan	354/354	100	100	-
<b>Country of birth</b>				
Sri Lanka	354/354	100	100	-
<b>Ethnicity</b>				
Sinhalese	326/353	92.1	93.5	91.4 – 95.9
Sri Lankan Tamil	18/353	5.1	4.6	2.5 – 6.5
Indian Tamil	2/353	0.6	0.4	0 – 1.0
Moor	0/353	-	-	-
Burgher / Malay	2/353	0.6	0.3	0 – 0.5
Other (Muslim)	2/353	0.6	0.3	0 – 0.7
Other	3/353	0.8	0.8	0.1 – 1.6
<b>District of residence during the past one year</b>				
Kandy	264/354	74.6	75.5	70.4 – 80.8
Colombo	55/354	15.5	13.5	9.5-17.1
Galle	6/354	1.7	2.0	0.4 – 3.6
Kalutara	2/354	0.6	0.4	0 – 0.8
Anuradhapura	13/354	3.7	4.1	1.6 – 6.6
Other <sup>42</sup>	14/354	4.0	4.6	2.0 – 7.3

<sup>42</sup> Other: Karunegala (n=4), Gampaha (n=3), Mathala (n=3), Badulla (n=1), Kegalle (n=1), Monaragala (n=1), Trincomalle (n=1)

Table 59: Socio-demographic characteristics, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Length of time lived in Kandy</b>				
< 1 year	81/351	23.1	23.0	17.7 – 28.3
≥ 1 year	270/351	76.9	77.0	71.7 – 82.3
<b>Primary residence</b>				
Kandy	185/354	52.3	54.7	48.9 – 61.0
Other	169/354	47.7	45.3	39.0 – 51.1
<b>Language spoken at home</b> (multiple answers possible)				
Sinhalese	341/354	96.3	97.0	95.3 – 98.6
Tamil	24/354	6.8	6.2	3.8 – 8.5
English	8/354	2.3	2.1	0.6 – 3.7
<b>Literate</b>				
Yes	308/354	87.0	87.1	82.6 – 91.8
<b>Highest level of education</b>				
Never attended school	19/354	5.4	4.9	2.4 – 7.4
Grade 1-5	48/354	13.6	16.5	11.6 – 21.9
Grade 6-10	129/354	36.4	32.8	27.2 – 37.4
Passed O/L	132/354	37.3	40.0	34.3 – 46.3
Passed A/L	26/354	7.3	5.8	3.3 – 8.0
Completed Diploma	0/354	0	0	-
Completed Degree	0/354	0	0	-
<b>Currently a student</b>				
Yes	1/354	0.3	0.4	0 – 0.9
<b>Type of institution enrolled in</b> (among current students)				
University	1/1	100	100	-
Technical College	0/1	0	0	-
Vocational School	0/1	0	0	-
<b>Monthly personal income</b>				
< 5,000 Rupees	7/354	2.0	2.0	0 – 4.0
5,000-10,000	19/354	5.4	6.6	2.1 – 11.4
10,001-20,000	35/354	9.9	8.5	4.8 – 12.0
20,001-30,000	68/354	19.2	17.7	13.2 – 21.9
30,001-40,000	117/354	33.1	32.0	25.9 – 37.9
> 40,000	108/354	30.5	33.2	27.0 – 40.0
<b>Number of people dependent on that income</b>				
Mean	2.8	-	2.7	-
SD	1.6	-	1.6	-
Median	3.0	-	2.0	-
Range	0 – 9	-	-	-
0	15/354	4.2	5.2	2.4 – 8.2
1	53/354	15.0	15.1	10.9 – 19.3
2	108/354	30.5	32.4	27.1 – 38.0
3	82/354	23.2	24.1	19.2 – 29.2
4	41/354	11.6	10.0	6.5 – 13.2
5 and more	55/354	15.5	13.2	9.4 – 16.6

Table 59: Socio-demographic characteristics, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Has source/s of income other than sex work</b>				
Yes	138/354	39.0	42.3	36.3 – 48.9
<b>Occupation</b> (among those who have another source of income)				
Street vendor/casual labourer	10/136	7.4	5.8	1.7 – 9.6
Factory worker	12/136	8.8	8.5	2.9 – 14.0
Professional/banker/accountant	0/136	-	-	-
Teacher	0/136	-	-	-
Business owner/self employed	17/136	12.5	14.3	6.9 – 22.1
Hairdresser/beautician/masseuse	83/136	61.0	62.1	50.8 – 73.8
Waitress/bartender/hotel employee	2/136	1.5	0.6	0 – 1.2
Musician/dancer/performer	0/136	-	-	-
Tourism/travel agent/tour guide	0/136	-	-	-
Government worker	0/136	-	-	-
Security guard	0/136	-	-	-
Fisherman/seafarer	2/136	1.5	1.4	0 – 3.3
Farmer/agriculture worker	0/136	-	-	-
Taxi driver/Three wheeler driver	5/136	3.7	4.5	0 – 9.3
Housemaid	5/136	3.7	2.8	0.1 – 5.2
Other <sup>43</sup>	4/136	2.9	2.2	0 – 5.3

FSW in Kandy are predominantly divorced or separated (42.9%), living with their children (60.1%) and with parents (31.8%) (Table 60). Over three quarters (84.3%) of FSW in Galle have children, mostly one (38.6%) or two (39.1%) children in total.

A 34 year old FSW shared that her husband, an ex-army officer, passed away. She worked in the garment sector before, but one and a half year ago, a women introduced her to sex work. At first she refused, but then went along with the women one night. She made so much money that she continued to be involved in sex work, mainly in weekends. Her mother takes care of her four year old daughter, and does not know she is involved in sex work.

<sup>43</sup> Other: Attendant (n=1), clerk (n=1), lottery sales (n=1), no job (n=1)

**Table 60: Marital status, living arrangements, and children, FSW Kandy**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Marital status</b>				
Single (never married)	30/354	8.5	8.1	5.2 – 10.9
Living together but not married	2/354	0.6	0.4	0 – 0.7
Married	120/354	33.9	33.9	28.1 – 39.7
Divorced/Separated	153/354	43.2	42.9	37.1 – 48.7
Widowed	49/354	13.8	14.8	10.8 – 18.9
<b>Mode of living</b> (multiple answers possible)				
Alone	38/354	10.7	9.3	6.1 – 12.3
With husband	69/354	19.5	22.9	17.4 – 29.0
With other sexual partner	66/354	18.6	15.5	11.3 – 19.1
With parents	114/354	32.2	31.8	26.5 – 37.0
With siblings	14/354	4.0	3.4	1.6 – 5.1
With children	190/354	53.7	60.1	55.3 – 66.0
With other family/relatives	9/354	2.5	2.7	0.7 – 4.6
With friend/roommate (not sexual partner)	5/354	1.4	1.5	0.2 – 2.8
With co-workers	0/354	-	-	-
<b>Type of residence</b>				
Temporary shelter	87/354	24.6	23.2	18.2 – 27.9
Boarding house	58/354	16.4	13.1	9.2 – 16.4
Parents' home	38/354	10.7	13.2	9.2 – 17.6
Their own home	132/354	37.3	40.9	34.5 – 48.1
Lodging	0/354	-	-	-
On the street	0/354	-	-	-
Brothel	37/354	10.5	9.2	5.4 – 12.8
Other <sup>44</sup>	2/354	0.6	0.4	0 – 0.7
<b>Has children</b>				
Yes	292/354	82.5	84.3	80.4 – 88.5
<b>Number of children</b>				
1	113/292	38.7	38.6	31.9 – 45.2
2	114/292	32.2	39.1	32.2 – 45.9
3	44/292	12.4	15.5	10.6 – 20.5
4	13/292	3.7	4.3	1.4 – 7.1
5 or more	8/292	2.3	2.6	0.7 – 4.6

### 8.3.8 General sexual history

The average age of first vaginal sex amongst FSW in Kandy is 19.2 years, with most FSW (45.7%) falling between 19 and 24 years of age. Nearly a third (27.1%) of FSW in Kandy have had anal sex. Most FSW (52.4%) have had between four and seven total sexual partners in the last seven days, and four to seven paying clients (46.9%). The average number of sexual partners in the last seven days is 6.6, with 6.4 paying and 0.3 non-paying. The possibility of intergeneration sex was assessed, and there were no cases of age of partner at first sex over 50 years of age (data not shown).

<sup>44</sup> Other: Friend's house (n=1), sister's house (n=1)

### FSW Kandy

A FSW also working as peer educator estimates that one fourth of the FSW in Kandy are young and the rest older. The younger sex workers tend to live in rented houses, while quite a few of the older ones cannot afford that. *“Younger sex workers are more in demand, and also earn more”*. This is not only because they look more attractive, but also they are more likely to respond to the demands of clients for anal and oral sex. *“Some clients demand many things that are rejected by the older sex workers. The newer (younger) ones, do offer these things. Because of that, the business for the older sex workers has gone down.”*

**Table 61: General sexual history, FSW Kandy**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Age at first vaginal sex</b>				
Mean	19.1	-	19.2	-
SD	3.0	-	3.2	-
Median	19.0	-	19.0	-
Range	13-34	-	-	-
<b>Age groups at first vaginal sex</b>				
< 16	26/352	7.4	7.8	4.6 – 11.0
16 – 18	141/352	40.1	40.2	34.3 – 46.2
19 – 24	166/352	47.2	45.7	39.9 – 51.3
≥ 25	19/352	5.4	6.3	3.1 – 9.7
<b>Had anal sex</b>				
Yes	111/354	31.4	27.1	21.7 – 31.6
<b>Age at first anal sex</b>				
Mean	22.5	-	23.2	-
SD	5.2	-	5.5	-
Median	20.0	-	22.0	-
Range	16-50	-	-	-
<b>Age groups at first anal sex</b>				
< 16	0/105	0	0	-
16 – 18	18/105	17.1	17.8	5.9 – 30.2
19 – 24	59/105	56.2	50.1	36.1 – 62.8
≥ 25	28/105	26.7	31.9	22.0 – 43.0
<b>Age of partner at first sex (vaginal or anal)</b>				
Mean	23.3	-	23.4	-
SD	4.7	-	4.6	-
Median	22.0	-	22.0	-
Range	15 - 45	-	-	-
<b>Age groups of partner at first sex (vaginal or anal)</b>				
< 16	3/341	0.9	0.6	0 – 1.2
16 – 18	26/341	7.6	7.3	4.3 – 10.2
19 – 24	202/341	59.2	61.0	55.4 – 66.9
≥ 25	110/341	32.3	31.1	25.7 – 36.3

Table 61: General sexual history, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of <u>all</u> sexual partners in the last 7 days</b>				
Mean	7.0	-	6.6	-
SD	5.0	-	4.8	-
Median	6.0	-	5.0	-
Range	0 – 60	-	-	-
0	7/354	2.0	1.5	0.02 – 3.0
1-3	54/354	15.3	16.7	11.2 – 22.5
4-7	167/354	47.2	52.4	46.5 – 59.4
8-10	76/354	21.5	17.4	13.1 – 21.0
11 or more	50/354	14.1	11.9	8.3 – 15.0
<b>Number of <u>paying</u> sexual partners (clients) in the last 7 days</b>				
Mean	6.9	-	6.4	-
SD	5.0	-	4.9	-
Median	6.0	-	5.0	-
Range	0 – 60	-	-	-
0	1/347	0.3	0.1	0 – 0.3
1-3	71/347	20.5	23.7	18.2 – 29.9
4-7	151/347	43.5	46.9	41.1 – 53.5
8-10	76/347	21.9	17.5	13.1 – 21.0
11 or more	48/347	13.8	11.7	8.1 – 15.0
<b>Number of <u>regular</u> (non-paying) sexual partners in the last 7 days</b>				
Mean	0.3	-	0.3	-
SD	0.6	-	0.7	-
Median	0	-	-	-
Range	0 – 5	-	-	-
0	273/347	78.7	74.1	67.8 – 79.3
1	64/347	18.4	22.6	17.7 – 28.4
2 or more	10/347	2.9	3.3	7.5 – 6.0
<b>Number of <u>all</u> sexual partners in the last 30 days</b>				
Mean	18.8	-	-	-
SD	12.4	-	-	-
Median	15.0	-	-	-
Range	1 – 100	-	-	-
0	0/354	-	-	-
1-10	89/354	25.1	28.6	21.0 – 37.1
11-20	140/354	39.5	42.7	36.5 – 49.6
21-30	88/354	24.9	19.5	13.9 – 24.0
31 or more	37/354	10.5	9.0	6.0 – 11.8

Table 61: General sexual history, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of paying sexual partners (clients) in the last 30 days</b>				
Mean	18.5	-	-	-
SD	12.5	-	-	-
Median	15.0	-	-	-
Range	1 – 100	-	-	-
0	0/354	-	-	-
1-10	97/354	27.4	31.0	23.3 – 39.4
11-20	133/354	37.6	40.8	34.6 – 47.7
21-30	87/354	24.6	19.1	13.7 – 23.5
31 or more	37/354	10.5	9.0	6.0 – 11.8
<b>Number of regular (non-paying) sexual partners in the last 30 days</b>				
Mean	0.3	-	0.4	-
SD	0.6	-	0.7	-
Median	0	-	-	-
Range	0 – 5	-	-	-
0	264/354	74.6	70.4	64.3 – 75.6
1	73/354	20.6	24.0	19.0 – 29.7
2	13/354	3.7	4.1	1.8 – 6.5
3 or more	4/354	1.1	1.5	0 – 3.6

### 8.3.9 Sexual history with paying partners (clients)

The average age of first transactional sex amongst FSW in Kandy is 27.4, with 4.0% having started at 18 years or younger (i.e. underage sex work). Reasons for first selling sex include the same as in the other districts, needing money (88.7%) and not having another job (49.5%). On average, FSW in Kandy have 1.8 clients in a working day, and receive 1,822 Rupees per sex act, which was most frequently vaginal sex (98.7%) the last time they engaged in transactional sex. Of note, both oral sex (70.1%) and short term companionship (60.7%) is more present in terms of type of sex last exchanged, compared with the other districts. Respondents typically find client in brothels (30.6%), massage parlours / spas / salons (28.3%), and in the street / park / public transport (22.2%). Sex with clients is most frequently had in hotels (85.3%). Most FSW (94.3%) in Kandy used a condom at last sex with a client, with the FSW typically suggesting condom use (98.9%), and the main reason for usage to prevent HIV and STIs (90.0%) and not trusting the partner (44.3%). For those that did not use a condom, never having heard of a condom was the primary reason (52.4%), followed by partner objected (27.6%). FSW in Kandy, similar to the other districts, have had sex with clients without a condom when the client has offered to pay more (13.4%). Clients are predominantly Sri Lankan (99.3%). Only three FSW in Kandy (0.8%) indicated their last client's HIV status to be positive.

Regarding clients of FSW, one FSW in Kandy in her forties said that her clients include traders, government servants, armed forces, construction workers and daily labourers, and more specifically, "the ones who pay most are those of the armed forces, traders pay second highest. From government servants, it is often hard to get any payment at all".



**Table 62: Sexual history with paying clients, FSW Kandy**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Age at first experience of selling sex</b>				
Mean	26.6	-	27.4	-
SD	5.7	-	5.8	-
Median	26.0	-	27.0	-
Range	15-49	-	-	-
<b>Age groups at first experience of selling sex</b>				
< 16	1/349	0.3	0.2	0 – 0.6
16 – 18	15/349	4.3	3.8	1.9 – 5.5
19 – 24	109/349	31.2	25.2	20.1 – 29.1
≥ 25	224/349	64.2	70.8	66.8 – 76.1
<b>Reasons for first experience of selling sex</b> (multiple answers possible)				
Need money	308/353	87.3	88.7	85.5 – 92.1
Didn't have other job	160/353	45.3	49.5	43.6 – 56.2
Grew up around people who did sex work	5/353	1.4	1.0	0.2 – 1.7
Forced/Pressured into it	10/353	2.8	2.3	0.7 – 3.9
I like it/For pleasure	4/353	1.1	1.1	0.02 – 2.1
Encouraged by friends/people I know	25/353	7.1	7.0	4.4 – 9.7
It pays well	27/353	7.6	7.9	4.8 – 11.0
Abandoned by parents/siblings	8/353	2.3	1.6	0.5 – 2.5
Abandoned by husband	87/353	24.6	24.5	19.4 – 29.5
Extra money	28/353	7.9	7.8	4.0 – 11.4
Orphan	20/353	5.7	4.2	2.3 – 5.8
Other <sup>45</sup>	3/353	-	-	-
<b>Condom use during last 30 days</b>				
Every time	270/353	76.5	74.5	69.0 – 79.5
Almost every time	51/353	14.4	15.6	11.4 – 20.1
Sometimes	27/353	7.6	7.8	4.6 – 11.0
Never	4/353	1.1	1.9	0 – 4.3
Don't know	1/353	0.3	0.2	0 – 0.4
<b>Had sex only <u>one time</u> with a majority of clients in the last 12 months</b>				
Yes, has sex only one time with most clients	136/354	38.4	31.3	25.5 – 35.7
No, has sex more than one time with most clients	200/354	56.5	64.0	59.2 – 70.2
Don't know	18/354	5.1	4.7	23.8 – 70.1

<sup>45</sup> Other: Death of a husband (n=3)

Table 62: Sexual history with paying clients, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of clients on the last day they sold sex</b>				
Mean	1.97	-	1.83	-
SD	1.5	-	1.3	-
Median	2.0	-	2.0	-
Range	1-20	-	-	-
1	152/354	42.9	48.3	42.9 – 54.8
2	126/354	35.6	34.0	28.5 – 39.2
3 or more	76/354	21.5	17.7	13.2 – 21.4
<b>Amount of money typically received for sex</b>				
Mean	1786.7	-	1822.3	-
SD	909.0	-	921.0	-
Median	1500.0	-	1500.0	-
Range	500-5000	-	-	-
≤ 1000 Rupees	119/353	33.7	32.9	27.2 – 38.3
> 1000 Rupees	234/353	66.3	67.1	61.7 – 72.8
<b>Type of sex last exchanged for that amount of money</b> (multiple answers possible)				
Oral sex	243/354	68.6	70.1	64.4 – 75.9
Vaginal sex	351/354	99.2	98.7	97.5 – 99.8
Anal sex	37/354	10.5	9.0	5.6 – 12.0
Short term (hours or less) companionship	191/354	54.0	60.7	56.0 – 66.8
Long term (i.e.: night/weekend) companionship	14/354	4.0	4.4	1.8 – 7.2
<b>Person who decides how much the client pays</b>				
Pimp/Tout	58/354	16.4	15.9	11.3 – 20.4
Owner of the brothel	79/354	22.3	21.8	17.1 – 26.5
Woman decides	208/354	58.8	59.4	53.3 – 65.7
The client decides	9/354	2.5	2.8	1.0 – 4.7

Table 62: Sexual history with paying clients, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Places where they normally find clients<sup>46</sup></b>				
Brothel	114/354	32.2	30.6	23.2 – 37.6
Bar/café/disco/restaurant/night club	0/354	-	-	-
Hotel	44/354	12.4	9.7	6.2 – 12.6
Street, park, or public transport	74/354	20.9	22.2	12.9 – 31.7
Through friends	18/354	5.1	5.8	2.6 – 9.1
Internet, chat, or SMS	2/354	0.6	0.6	0 – 1.2
Motel or guest house	7/354	2.0	1.6	0.2 – 2.9
School	0/354	-	-	-
Party	0/354	-	-	-
Service station	1/354	0.3	0.09	0 – 0.2
Intermediary (pimp, bartender, taxi driver)	2/354	0.6	0.6	0 – 1.3
Truck stop / three wheeler stop	1/354	0.3	0.1	0 – 0.3
Massage parlour/Spa/Salon	89/354	25.1	28.3	20.5 – 36.9
Other <sup>47</sup>	1/354	0.3	0.2	0.1 – 0.6
Don't know	1/354	0.3	0.2	0 – 0.6
<b>Places where they normally have sex with clients</b>				
Brothel	121/354	34.2	32.6	26.3 – 38.6
Hotel/Guest house	298/354	84.2	85.3	81.3 – 89.5
Massage parlour	82/354	23.2	23.0	17.8 – 28.2
Their own home	22/354	6.2	9.5	5.1 – 14.6
Client's home	8/354	2.3	2.8	0.9 – 4.9
Car	7/354	2.0	1.3	0.4 – 2.2
Park	2/354	0.6	0.4	0 – 0.9
<b>Used a condom at last sex with a client</b>				
Yes	338/354	95.5	94.3	91.2 – 97.2
<b>Person who suggested to use a condom</b>				
Woman did	334/338	98.8	98.9	97.7 – 100
Client did	4/338	1.2	1.1	0 – 2.3
<b>Reasons for using a condom (multiple answers possible)</b>				
To prevent HIV/STIs	289/338	85.5	90.0	86.9 – 93.2
Do not trust partner	163/338	48.2	44.3	38.2 – 49.7
Messages advising use of condoms	10/338	3.0	2.6	0.8 – 4.2
To prevent pregnancy	55/338	16.3	15.7	11.1 – 20.1

<sup>46</sup> Not a multiple choice question, as originally labeled in the questionnaire

<sup>47</sup> Other: Market (n=1)

Table 62: Sexual history with paying clients, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for <u>not</u> using a condom</b> (multiple answers possible)				
Never heard of condoms	8/16	50.0	52.4	25.4 – 80.4
Don't know how to obtain condoms	1/16	6.3	9.2	0 – 26.5
Didn't think it was necessary	2/16	12.5	16.1	0 – 36.2
Didn't think of it	0/16	-	-	-
Not available	1/16	6.3	4.1	0 – 11.6
Too expensive	0/16	-	-	-
Partner objected	5/16	31.3	27.6	4.5 – 49.2
Don't like them	2/16	12.5	13.0	0 – 30.4
Used other contraceptive	1/16	6.3	3.4	0 – 9.4
Used other prevention method	0/16	-	-	-
Partner was a faithful client	2/16	12.5	16.0	0 – 36.4
Partner was a regular client	0/16	-	-	-
Condoms take away pleasure	1/16	6.3	9.6	0 – 27.2
<b>Ever had intercourse with a client without a condom, because the client paid extra money</b>				
Yes	58/354	16.4	13.4	9.4 – 16.8
<b>Nationality of last client</b>				
Sri Lankan	350/354	98.9	99.3	98.9 – 99.8
Other <sup>48</sup>	4/354	1.1	0.7	0.2 – 1.1
<b>Last client's HIV status</b>				
Negative	264/354	74.6	75.7	70.6 – 81.0
Positive	3/354	0.8	1.0	0 – 2.2
Don't know	87/354	24.6	23.3	18.1 – 28.4

### 8.3.10 Sexual history with non-paying partners

During the last 30 days FSW in Kandy typically never used condoms with non-paying partners (66.4%), illustrated further by only a third (32.3%) who used a condom at last sex with a non-paying partner (Table 63). Reasons for not using condoms focused on it being with a faithful partner (48.6%), regular partner (45.7%), and partner objection (33.0%).

Table 63: Sexual history with non-paying partners, FSW Kandy

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Condom use during last 30 days</b> (among those who had a non-paying partner in the last 30 days)				
Every time	17/90	18.9	14.1	5.9 – 21.4
Almost every time	8/90	8.9	8.9	0.8 – 16.8
Sometimes	12/90	13.3	10.7	5.9 – 15.1
Never	53/90	58.9	66.4	57.3 – 76.8

<sup>48</sup> Other: German (n=2), Indian (n=2)

Table 63: Sexual history with non-paying partners, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Used a condom at last sex</b>				
Yes	71/152	46.7	32.3	22.8 – 38.8
<b>Person who suggested to use a condom</b>				
Woman did	71/71	100	100	-
Partner did	0/71	-	-	-
<b>Reasons for using a condom</b> (multiple answers possible)				
To prevent HIV/STIs	25/71	35.2	35.4	23.6 – 47.6
Do not trust partner	61/71	85.9	84.0	74.7 – 92.7
Messages advising use of condoms	3/71	4.2	4.9	0.06 – 10.0
To prevent pregnancy	19/71	26.8	26.6	14.5 – 38.6
<b>Reasons for <u>not</u> using a condom</b> (multiple answers possible)				
Never heard of condoms	5/81	6.2	6.1	0 – 13.2
Don't know how to obtain condoms	1/81	1.2	0.8	0 – 2.1
Didn't think it was necessary	1/81	1.2	1.3	0 – 3.5
Didn't think of it	0/81	-	-	-
Not available	1/81	1.2	0.8	0 – 2.1
Too expensive	0/81	-	-	-
Partner objected	31/81	38.3	33.0	21.7 – 43.4
Don't like them	11/81	13.6	11.9	3.5 – 20.1
Used other contraceptive	0/81	-	-	-
Used other prevention method	0/81	-	-	-
Faithful partner	33/81	40.7	48.6	35.9 – 62.5
Regular partner	42/81	51.9	45.7	32.4 – 57.9
Condoms take away pleasure	14/81	17.3	16.4	8.9 – 24.0

### 8.3.11 Male condom availability and usage

Nearly all FSW in Kandy have heard of male condoms (98.5%), ever used a male condom (99.5%), and know where to obtain male condoms (96.4%) (Table 64). The most common place where FSW can obtain condoms is private pharmacies (84.1%) and Government STD clinics (29.7%), similar to their main sources of condoms, as is the same trend across all districts. More than three quarters of FSW in Kandy carry condoms with them (75.8%), but only a third (31.5%) of FSW have received free condoms from an NGO or health centre in the past 12 months. FSW in Kandy find condoms to be somewhat or very affordable (95.4%) and very easy or somewhat easy to obtain (97.8%), with a similar trend across all districts.

One FSW in her forties has seen a change in condom use. "In the old days, no condoms were used, but that has changed. Now they are being used. Some people are selective about what condoms they use, some people prefer a specific brand of condoms. The FSW get their condoms from the government, but only one type".

**Table 64: Male condom availability and usage, FSW Kandy**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of a male condom</b>				
Yes	348/354	98.3	98.5	97.2 – 99.8
<b>Ever used a male condom</b>				
Yes	346/348	99.4	99.5	99.0 – 100
<b>Knows where to obtain male condoms</b>				
Yes	336/348	96.6	96.4	94.0 – 98.8
<b>Places where they can obtain male condoms</b> (multiple answers possible)				
Government STD clinic	101/336	30.1	29.7	22.8 – 36.6
Government non-STD clinic	3/336	0.9	0.6	0.08 – 1.0
Private clinic	12/336	3.6	4.3	1.5 – 7.3
Private pharmacy or chemist	281/336	83.6	84.1	80.1 – 88.3
Traditional healer/Herbalist	0/336	-	-	-
Neighbourhood market/Stand	2/336	0.6	0.8	0.02 – 15.7
Friends	24/336	7.1	7.6	4.8 – 10.5
Sex partner/s	52/336	15.5	17.1	12.4 – 22.0
Bar	0/336	-	-	-
Service Station/s	2/336	0.6	0.5	0 – 1.3
Other – NGO	29/336	8.6	9.0	5.6 – 12.5
Don't know	1/336	0.3	0.6	0 – 1.4
<b>Main source/s of condoms</b> (multiple answers possible)				
Government STD clinic	97/347	28.0	26.8	20.9 – 32.6
Government non-STD clinic	2/347	0.6	0.7	0 – 1.6
Private clinic	11/347	3.2	3.0	1.2 – 4.7
Private pharmacy or chemist	281/347	81.0	80.9	76.5 – 85.4
Traditional healer/Herbalist	0/347	-	-	-
Neighbourhood market/Stand	0/347	-	-	-
Friends	32/347	9.2	10.0	6.9 – 13.2
Sex partner/s	63/347	18.2	20.8	16.0 – 26.1
Bar	0/347	-	-	-
Service Station/s	3/347	0.9	0.4	0 – 0.7
NGO	32/347	9.2	9.8	6.2 – 13.5
Client	1/347	0.3	0.2	0 – 0.5
Don't know	1/347	0.3	0.1	0 – 0.3
<b>Usually carries condoms</b>				
Yes	275/348	79.0	75.8	70.0 – 80.1
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>				
Yes	116/348	33.3	31.5	25.7 – 37.0

Table 64: Male condom availability and usage, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Person who usually provides condoms</b>				
Never uses a condom	2/348	0.6	1.3	0 – 3.5
Woman does	310/348	89.1	88.7	84.5 – 92.8
Client does	17/348	4.9	5.9	3.0 – 9.1
Owner / Manager of the place	19/348	5.5	4.1	2.0 – 5.9
<b>Condom is affordable</b>				
Very affordable	325/347	93.7	94.5	92.2 – 97.0
Somewhat affordable	6/347	1.7	1.5	0.2 – 2.8
Not affordable	6/347	1.7	1.4	0.2 – 2.5
Don't know	10/347	2.9	2.6	0.8 – 4.3
<b>Condom is easy to obtain</b>				
Very easy	330/347	95.1	96.2	94.4 – 98.1
Somewhat easy	6/347	1.7	1.6	0.2 – 2.9
Not easy	8/347	2.3	1.5	0.4 – 2.4
Don't know	3/347	0.9	0.8	0.01 – 1.6

### 8.3.12 Female condom availability and usage

While nearly two-thirds of FSW in Kandy have heard of a female condom (a larger percentage than in the other districts), less than a third have used one (28.5%) and few would be interested in using them in the future (6.5%) (Table 65).

A FSW in her forties “I only got a female condom once, but I did not use it. I did not like it to be inserted, and clients would also notice it straight away”.

Table 65: Female condom availability and usage, FSW Kandy

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of a female condom</b>				
Yes	210/354	59.3	63.8	58.7 – 69.8
<b>Ever used a female condom</b>				
Yes	57/210	27.1	28.5	21.8 – 35.4
<b>Would consider using a female condom in the future</b>				
Yes	14/210	6.7	6.5	2.9 – 10.0
No	196/210	93.3	93.5	90.0 – 97.1

### 8.3.13 Lubricant availability and use

Very few FSW in Kandy have ever heard of lubricant (7.3%) and more than half (53.3%) have never used it for vagina or anal sex (Table 66). Of those who have used lubricant, the most common type is ‘what I get from peer educator’. Over half (59.9%) of FSW in Kandy are not interested in using lubricant in the future.

**Table 66: Lubricant availability and usage, FSW Kandy usage**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of lubricant</b>				
Yes	30/350	8.6	7.3	4.7 – 9.7
<b>Lubricant use during vaginal or anal sex</b>				
Always	2/30	6.7	5.8	0 – 13.0
Usually	2/30	6.7	3.3	0 – 6.8
Sometimes	6/30	20.0	21.5	6.2 – 36.7
Rarely	4/30	13.3	15.1	1.7 – 28.5
Never	16/30	53.3	54.3	36.5 – 73.0
<b>Type of lubricant used</b>				
Glycerine	0/14	-	-	-
Saliva/Water	1/14	7.1	11.3	0 – 31.0
Vaseline	2/14	14.3	7.2	0 – 14.5
Baby Oil	2/14	14.3	14.7	0 – 34.1
Lotion	0/14	-	-	-
Other Oil	0/14	-	-	-
Water-Based	9/14	64.3	63.3	37.4 – 89.0
Silicone-Based	0/14	-	-	-
Soap	0/14	-	-	-
<b>Interested in using lubricant in the future</b>				
Yes	12/30	40.0	35.1	17.8 – 51.1
No	17/30	56.7	59.9	42.7 – 77.9
Don't know	1/30	3.3	5.0	0 – 14.6

### 8.3.14 Knowledge of STI symptoms in women and men

Over three quarters of FSW in Kandy have heard of STIs, but only just over half know it is possible to have an STI without any symptoms (59.8%) (Table 67). The most commonly mentioned signs of STIs in women and men are genital discharge (in women: 84.0%; in men: 56.1%) and itching (in women: 78.1%; in men: 66.0%). The Government STD clinic is the most commonly mentioned place to obtain treatment for an STI (50.9%).

**Table 67: Knowledge of STI symptoms in women and men, FSW Kandy**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of diseases that can be transmitted sexually</b>				
Yes	297/354	83.9	84.4	80.1 – 88.7
<b>Knows it is possible to have an STI without symptoms</b>				
Yes	208/354	58.8	59.8	53.5 – 66.2



Table 67: Knowledge of STI symptoms in women and men, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of diseases that can be transmitted sexually</b>				
Yes	297/354	83.9	84.4	80.1 – 88.7
<b>Mentioned as a sign/symptom of STIs in women</b> (multiple answers possible)				
Abdominal pain	24/296	8.1	6.5	3.7 – 9.1
Genital discharge	241/296	81.4	84.0	80.0 – 88.4
Foul smelling discharge	77/296	26.0	29.3	22.8 – 36.3
Burning pain on urination	84/296	28.4	23.1	17.8 – 27.3
Genital ulcers or sores	23/296	7.8	79.7	4.8 – 11.2
Swelling in groin area	168/296	56.8	62.7	57.6 – 69.1
Itching	219/296	74.0	78.1	73.8 – 83.1
<b>Does not know any symptoms of STIs in women</b> (among those who have heard of STIs)				
Yes	9/296	3.0	2.8	0.8 – 4.9
<b>Mentioned as a sign/symptom of STIs in men</b> (multiple answers possible)				
Abdominal pain	17/295	5.8	5.2	2.5 – 7.8
Genital discharge	165/295	55.9	56.1	49.7 – 62.7
Foul smelling discharge	19/295	6.4	6.0	2.9 – 9.1
Burning pain on urination	60/295	20.3	18.1	13.5 – 22.2
Genital ulcers or sores	17/295	5.8	5.8	3.1 – 8.5
Swelling in groin area	154/295	52.2	56.6	51.0 – 63.0
Itching	186/295	63.1	66.0	60.7 – 71.8
<b>Does not know any symptoms of STIs in men</b> (among those who have heard of STIs)				
Yes	55/295	18.6	17.8	12.8 – 22.7
<b>Places where someone from the community who has an STI can get treatment</b> (multiple answers possible)				
Ayurvedic physician	1/354	0.3	0.2	0 – 0.4
Pharmacy	2/354	0.6	0.5	0 – 1.0
Private clinic	46/354	13.0	11.2	7.8 – 14.4
Government STD clinic	185/354	52.3	50.9	44.8 – 56.7
Government clinic or hospital (non-STD)	81/354	22.9	26.7	21.2 – 32.7
Don't know	54/354	15.3	15.5	11.6 – 19.6

### FSW Kandy

A FSW peer educator said “When FSW have a STI, they go to the STD clinic. However, that is a time-consuming affair. They go in the morning but have to spend many hours. They do not pay much attention there. FSW have to wait longer (to get their files looked up), others are serviced better... The doctors are willing to do their part properly, they do their part well. The blood drawing is done well, but the initial part, the FSW don’t like. This is the part where they get registered, and they have to answer many questions. Then again with the Public Health Investigator they get many questions again, and again they get questions with the doctor.”

### 8.3.15 Patterns of STI seeking behaviour

Few FSW in Kandy in the last 12 months had a doctor confirm an STI (12.5%), or have self-reported discharge (11.6%) or an ulcer/sore (11.1%); however, of those who did, nearly all sought treatment (discharge: 91.0%; ulcer/sore: 90.4%) (Table 68). Government STD clinics are the most common places where treatment is sought (84.6%), with this venue frequently chosen because of confidentiality (86.3%) and recommendation by a friend (46.5%). Nearly all FSW in Kandy told the provider they exchange sex for money (97.0%) and all (100.0%) were satisfied with treatment.

**Table 68: Patterns of STI seeking behaviour, FSW Kandy**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Doctor confirmed STI in the last 12 months</b>				
Yes	33/297	11.1	12.5	8.1 – 17.2
<b>STI symptoms (discharge) in the last 12 months</b>				
Yes	34/354	9.6	11.6	7.5 – 16.2
<b>Sought treatment for discharge</b>				
Yes	33/34	97.1	91.0	77.8 – 100
<b>Reasons for not seeking treatment for discharge</b> (multiple answers possible)				
Didn't know where to go	1/1	100	100	-
Embarrassed or afraid	0/1	-	-	-
Could not afford treatment	0/1	-	-	-
Unable to get transportation	0/1	-	-	-
Didn't think I needed it	0/1	-	-	-
<b>STI symptoms (sore or ulcer) in the last 12 months</b>				
Yes	32/354	9.0	11.1	7.1 – 15.5
<b>Sought treatment for sore or ulcer</b>				
Yes	31/32	96.9	90.4	76.7 – 100
<b>Reasons for not seeking treatment for sore or ulcer<sup>49</sup></b> (multiple answers possible)				
Didn't know where to go	-	-	-	-
Embarrassed or afraid	-	-	-	-
Could not afford treatment	-	-	-	-
Unable to get transportation	-	-	-	-
Didn't think I needed it	-	-	-	-

<sup>49</sup> Reasons not provided

Table 68: Patterns of STI seeking behaviour, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Places where STI treatment (for discharge, sore, or ulcer) was sought</b> (multiple answers possible)				
Government STD clinic	30/33	90.9	84.6	67.6 – 100
Government non-STD clinic	1/33	3.0	9.8	0 – 27.1
Private clinic	2/33	6.1	5.3	0 – 12.0
Private pharmacy or chemist	0/33	-	-	-
Traditional healer/Herbalist	0/33	-	-	-
Medicine or herbs from home	0/33	-	-	-
Don't know	1/33	3.0	3.5	0 – 9.7
<b>Reasons for choosing this/these places</b> (multiple answers possible)				
Confidentiality	28/33	84.8	86.3	74.1 – 98.8
Affordability	5/33	15.2	10.4	1.3 – 18.8
Recommendation by friend or acquaintance	17/33	51.5	46.5	26.9 – 65.0
Quality and/or specialized care given at this place	1/33	3.0	3.5	0 – 9.7
Knows the caregivers	0/33	-	-	-
Known friendliness of the caregivers	0/33	-	-	-
Proximity/Location	2/33	6.1	5.3	0 – 12.2
<b>Told health care provider that they exchange sex for money last time they received STI treatment or diagnosis</b>				
Yes	33/35	94.3	97.0	93.6 - 100
<b>Satisfaction with treatment from health care provider during last visit for STI treatment</b>				
Very satisfied	35/35	100	100	-
Somewhat satisfied	0/35	-	-	-
Not satisfied	0/35	-	-	-

### 8.3.16 HIV information and personal risk perception

Over three quarters of FSW in Kandy have heard of HIV and AIDS, with the main source of information coming from health service (61.6%) (Table 69). Almost two thirds of respondents have discussed HIV with all of their sexual partners. FSW in Kandy predominantly believe they have a small risk of HIV (53.3%), those who believe they are at any risk (small, moderate and high) (78.7%) indicate many sexual partners as the reason (71.1%), while those who do not believe they are at risk (12.4%) cite always using condoms as the reason (94.1%). Of the 65 FSW in Galle who said they were at 'high risk', nearly all (n=58) used a condom at last sex with a client (data not shown).

Two FSW of 34 and 35 years of age said to be concerned with the diseases that they can contract. They said to use condoms regularly, and to also go for testing, because "you never know".

**Table 69: HIV information and personal risk perception, FSW Kandy**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of HIV/AIDS</b>				
Yes	300/354	84.7	85.4	81.3 – 89.7
<b>Main source of the most thorough information about HIV/AIDS</b>				
School	16/300	5.3	5.3	2.2 – 8.4
Health services	176/300	58.7	61.6	55.6 – 68.2
Workplace	4/300	1.3	1.0	0.06 – 1.9
Friends/Family	8/300	2.7	2.4	0.6 – 4.1
Television	22/300	7.3	7.5	3.7 – 11.3
Newspaper/Magazines	12/300	4.0	5.6	0.2 – 10.0
Posters/Billboards	12/300	4.0	4.9	2.1 – 8.0
Pamphlets/Leaflets	14/300	4.7	3.5	1.6 – 5.3
Radio	0/300	-	-	-
NGOs	36/300	12.0	8.1	5.0 – 10.4
<b>Discussed HIV/AIDS with any sexual partner</b>				
Yes, all	188/300	60.0	65.0	59.8 – 71.2
Yes, some	88/300	29.3	26.0	20.3 – 31.0
No, none	32/300	10.7	9.0	5.3 – 12.3
<b>Sexual partner/s told them their HIV status</b>				
Yes, all	21/268	7.8	7.7	4.4 – 11.0
Yes, some	165/268	61.6	57.5	50.6 – 63.6
No, none	82/268	30.6	34.8	28.6 – 41.8
<b>Knows somebody who is HIV-positive or has died of AIDS</b>				
Yes	70/300	23.3	21.7	16.3 – 26.7
<b>Close friend or relative died of HIV/AIDS</b>				
Yes, close relative	0/70	-	-	-
Yes, close friend	3/70	4.3	2.9	0 – 6.7
<b>Perception of personal HIV risk</b>				
No risk	48/354	13.6	12.4	8.5 – 16.2
Small risk	176/354	49.7	53.3	47.4 – 59.8
Moderate risk	33/354	9.3	9.9	6.3 – 13.6
High risk	65/354	18.4	15.5	10.9 – 19.6
Don't know	32/354	9.0	8.9	5.7 – 12.1

Table 69: HIV information and personal risk perception, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for believing they are at risk of contracting HIV</b> (among those who said they were at risk)				
Many sexual partners	192/274	70.1	71.1	64.2 – 78.3
Didn't always use condoms	70/274	25.5	25.1	18.5 – 31.6
Injected drugs	0/274	-	-	-
Partner has other partners	12/274	4.4	3.8	1.7 – 5.7
<b>Reasons for believing they are not at risk of contracting HIV</b> (among those who said they were not at risk) (multiple answers possible)				
Trust my partner/s	9/48	18.8	16.2	6.6 – 25.6
Always use condoms	44/48	91.7	94.1	89.1 – 99.6
Don't know	2/48	4.2	2.9	0 – 6.7

### 8.3.17 Knowledge of HIV and AIDS

Knowledge of HIV and AIDS in Kandy among FSW is higher compared with the other districts, with correct answers to individual knowledge indicators ranging between 70.1% and 92.1% (Table 70). The GARP composite knowledge indicator for both correctly identifying ways of preventing HIV and rejecting major misconceptions is 50.1%.

Table 70: Knowledge of HIV and AIDS, FSW Kandy

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners</b>				
Yes	310/353	87.6	88.3	84.3 – 92.5
<b>Person can reduce the risk of getting HIV by using a condom every time he/she has sex</b>				
Yes	326/354	92.1	92.1	88.7 – 95.5
<b>Healthy-looking person can have HIV</b>				
Yes	302/354	85.3	83.3	78.4 – 87.8
<b>Person can get HIV from mosquito bites</b>				
No	257/354	72.6	70.1	65.1 – 76.4
<b>Person can get HIV by sharing food with someone who is infected</b>				
No	286/354	80.8	80.0	74.5 – 84.4
<b>Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission</b>				
Yes	183/353	51.8	50.1	45.1 – 54.8

Table 70: Knowledge of HIV and AIDS, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>GARP Knowledge Composite Indicator without GARP4 (mosquito question)</b>				
Yes	222/353	62.9	60.2	53.2 – 66.9
<b>HIV can be transmitted from mother to her unborn child</b>				
Yes	302/354	85.3	89.1	86.6 – 92.3
No	43/354	12.1	8.7	5.8 – 10.8
Don't know	9/354	2.5	2.3	0.8 – 3.6
<b>Ever heard of ART</b>				
Yes	216/354	61.0	64.2	59.0 – 69.9

### Stigma related to HIV and AIDS

While three quarters (79.7%) of FSW in Kandy would agree to take care of an HIV positive family member at home and over two thirds (68.4%) believe, an HIV positive student should be allowed to go to school, there is still stigma present (Table 71). For example, only just over a quarter (27.2%) would agree to buy food from an HIV positive food seller. Furthermore, nearly all FSW in Kandy (88.7%) would keep it a secret if a family member were HIV positive.

Table 71: Stigma related to HIV and AIDS, FSW Kandy

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Agrees to take care of an HIV positive family member at home</b>				
Yes	278/354	78.5	79.7	75.2 – 84.4
<b>Agrees that an HIV positive student should be allowed to continue attending a school</b>				
Yes	241/354	68.1	68.4	62.6 – 74.1
<b>Agrees to buy food from an HIV positive food seller</b>				
Yes	108/354	30.6	27.2	21.7 – 32.1
<b>Thinks that, if a family member becomes HIV positive, his/her HIV status should remain confidential</b>				
Yes	291/354	82.2	88.7	86.6 – 92.0

### 8.3.18 HIV testing

Nearly two thirds (63.7%) of FSW in Kandy know where to go for an HIV test, however only just over a third (35.6%) have ever been tested, and only just over a quarter (26.5%) have been tested in the last 12 months and know their result (Table 72). Almost half (49.7%) of those never tested do not know where to go. Most HIV tests took place in a Government STD clinic and (93.8%) and nearly all respondents were satisfied with the service provided (99.3%). In fact, all but one respondent disclosed to the service provider that they sell sex.

FSWs said in the qualitative interviews that a big obstacle for HIV testing, is the fear for being recognized, to encounter someone they know. “Many FSW are scared to come, this is not because of the HIV test, and the test result, but because they are afraid that other people will see them (and notice they are sex workers). People do not have a fear for the HIV test, the reason for this is that since they are okay, they think that they don’t have a sickness.”

**Table 72: HIV testing, FSW Kandy**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Knows where HIV testing can be obtained</b>				
Yes	229/354	64.7	63.7	57.6 – 69.5
<b>Ever tested for HIV</b>				
Yes	127/354	35.9	35.6	29.7 – 41.4
<b>The test was voluntary</b>				
Yes	117/127	92.1	92.5	88.8 – 96.1
<b>Site where last testing for HIV took place</b> (multiple answers possible)				
Government STD Clinic	117/127	92.1	93.8	90.4 – 97.5
Government non-STD Clinic	3/127	2.4	22.5	0.04 – 4.4
Private Clinic	9/127	7.1	5.0	1.5 – 8.0
Private Pharmacy or Chemist	1/127	0.8	0.7	0 – 1.6
<b>Reasons for never getting an HIV test</b> (multiple answers possible)				
Don't know where to go	107/227	47.1	49.7	42.0 – 57.9
Always use condoms	68/227	30.0	30.7	23.6 – 37.9
Not at risk of getting HIV	16/227	7.0	5.6	2.8 – 8.1
Didn't have time/Too busy	36/227	15.9	15.6	9.5 – 21.4
I trust my partner	4/227	1.8	1.8	2.6 – 3.4
Afraid of knowing I may be HIV positive	10/227	4.4	3.2	1.1 – 5.1
Lack of confidentiality	5/227	2.2	2.5	0 – 5.2
Inconvenient testing location	34/227	15.0	12.1	7.5 – 16.1
No money	1/227	0.4	0.2	0 – 0.5
Don't know	2/227	0.9	0.9	0.2 – 1.7
<b>Time since last HIV test</b>				
≤ 1 year	104/127	81.9	81.8	74.6 – 88.9
> 1 year	22/127	17.3	17.2	10.1 – 24.3
Don't know	1/127	0.8	1.0	0 – 2.6
<b>Knows result of last HIV test</b>				
Yes	118/127	92.9	92.6	87.1 – 98.1
<b>Tested for HIV in the past 12 months and knows result</b>				
Yes (among those who tested)	95/126	75.4	75.1	66.5 – 83.8
Yes (among all)	95/354	26.8	26.5	21.2 – 31.7

Table 72: HIV testing, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for the last HIV test</b> (multiple answers possible)				
Wanted to know my HIV status	123/127	96.9	96.0	91.5 – 100
My partner asked me to get tested	2/127	1.6	1.0	0 – 1.9
Wanted to start sexual relations with a new partner	2/127	1.6	1.3	0 – 2.8
Wanted to get married	0/127	-	-	-
Need for loan/insurance coverage	0/127	-	-	-
Employer requested the test	0/127	-	-	-
Felt sick	2/127	1.6	1.3	0 – 2.8
Advised by health worker	2/127	1.6	1.3	0 – 3.1
Advised by peer educator	0/127	0	0	-
Pregnant	1/127	0.8	0.8	0 – 1.9
<b>Result of last HIV test</b>				
HIV-negative	118/123	95.9	94.5	88.6 – 99.9
HIV-positive	0/123	-	-	-
Indeterminate	0/123	-	-	-
Did not get the result	4/123	3.3	4.5	0 – 10.1
Don't know	1/123	0.8	1.1	0 – 2.6
<b>Reason for not getting last HIV test result</b>				
Didn't have time/Too busy	3/4	75.0	32.8	0 – 70.0
Not infected	0/4	-	-	-
Too scared	0/4	-	-	-
Testing centre didn't have result	0/4	-	-	-
Other	1/4	25.0	67.2	30.0 – 100
<b>Perception of current HIV status</b>				
HIV-negative	260/354	73.4	73.5	68.0 – 79.0
HIV-positive	1/354	0.3	0.5	0 – 1.6
Don't know	93/354	26.3	26.0	20.4 – 31.5
<b>Satisfaction with quality of services provided during last HIV testing</b>				
Very satisfied	125/127	98.4	98.9	98.4 – 99.4
Satisfied	1/127	0.8	0.4	0 – 0.7
A little satisfied	0/127	-	-	-
Not satisfied	1/127	0.8	0.7	0.5 – 1.1
<b>Told health care provider or counsellor that they exchange sex for money at last HIV testing</b>				
Yes	126/127	99.2	99.6	99.5 – 99.8



Table 72: HIV testing, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for not telling health care provider or counsellor they exchange sex for money</b> (multiple answers possible)				
Afraid of discrimination/Not providing testing	0/1	-	-	-
Afraid provider would tell police/legal authorities	1/1	100	100	-
It was not necessary to discuss	0/1	-	-	-
Afraid provider would not keep information confidential	0/1	-	-	-
Little or no contact/interaction with counsellor/provider	0/1	-	-	-
Shy/Embarrassed	0/1	-	-	-
Provider already knew	0/1	-	-	-
<b>Felt that health care provider or counsellor reacted in a negative or discriminatory way because they exchange sex for money</b>				
Yes	0/126	-	-	-
<b>Health care provider or counsellor's behaviour</b> (multiple answers possible)				
It was uncomfortable	-	-	-	-
Stopped talking to me	-	-	-	-
Asked me to leave	-	-	-	-
Verbally abused or scolded me	-	-	-	-

### 8.3.19 Experience of stigma, discrimination and violence

Experiences of stigma, discrimination and violence vary amongst FSW in Kandy, with less than five percent being refused health care (2.3%), police assistance (2.4%), physically assaulted (1.5%) or sexually assaulted (2.7%); however nearly a quarter have been verbally insulted (20.9%) (Table 73).

A peer educator FSW said that before, when they were caught with condoms by the police, they would be arrested. But now, after the police has been given some awareness about the project, this is no longer the case. Those with condoms can go now, she knows from personal experience. Another FSW of 37 years said that FSWs face many challenges, they often live with the three wheeler drivers or are married to police officers, and often a culture of abuse and rape is the case. For instance when the FSWs are away or when they are arrested and in jail, their children are abused by these 'husbands of convenience' or 'temporary husbands'. Often not the fathers of the children, the FSW choose to live with them for reasons of safety and security, but this is not always the case. "We face much insecurity in our lives".

**Table 73: Experience of stigma, discrimination and violence, FSW Kandy**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Has been refused health care because someone believed they sold sex to men</b>				
Yes	11/354	3.1	2.3	0.8 – 3.6
<b>Has been refused police assistance because someone believed they sold sex to men</b>				
Yes	13/354	3.7	2.4	1.0 – 3.6
<b>Has been verbally insulted because someone believed they sold sex to men</b>				
Yes	68/354	19.2	20.9	15.8 – 26.2
<b>Has been hit, kicked, or beaten because someone believed they sold sex to men</b>				
Yes	3/354	0.8	1.5	0 – 3.8
<b>Has been sexually assaulted or raped</b>				
Yes	10/353	2.8	2.7	0.6 – 4.8
<b>Type of abuser last time they were sexually assaulted or raped</b>				
Unknown person	0/10	-	-	-
Social acquaintance	0/10	-	-	-
Family member/Relative	1/10	10.0	6.2	0 – 19.8
Police	4/10	40.0	24.1	0 – 51.2
Client	4/10	40.0	65.1	30.5 – 100
Other sex worker	0/10	-	-	-
Pimp	1/10	10.0	4.6	0 – 14.3
Non-paying partner or boyfriend	0/10	-	-	-
<b>Sought medical treatment after sexual assault/rape</b>				
Yes	1/10	10.0	2.8	0 – 7.5
<b>Reported sexual assault/rape to the police</b>				
Yes	2/10	20.0	9.9	0 – 25.4

### 8.3.20 Health care utilization and pregnancy

Nearly three quarters of FSW in Kandy have sought medical care in the last 12 months, far higher than the other FSW groups in the other districts (Table74). Only one respondent reported difficulty in accessing care, related to expense. Only 0.9% of FSW in Kandy are currently pregnant, although more than a quarter (27.8%) had given birth in the past five years.

**Table 74: Healthcare utilization and pregnancy, FSW Kandy**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Sought medical care for any reason during last 12 months</b>				
Yes	229/354	64.7	72.0	67.9 – 77.6
<b>Had difficulty getting medical care during last 12 months</b>				
Yes	1/229	0.4	0.3	0 – 0.7
<b>Type of difficulty</b> (multiple answers possible)				
Too expensive	1/1	100	100	-
Too far away	0/1	-	-	-
Could not take time from work	0/1	-	-	-
Long waiting times	0/1	-	-	-
<b>Currently pregnant</b>				
Yes	4/354	1.1	0.9	0.03 – 1.8
<b>Gave birth in the last 5 years</b>				
Yes	89/354	25.1	27.8	22.6 – 33.7

### 8.3.21 Programme coverage

Less than a quarter (17.2%) of FSW in Kandy have been in contact with a peer educator in the last six months, of those that did they mainly received information on HIV and STIs (95.2%) and condoms (88.6%) (Table 75). Frequency of contact was also high, with more than three quarters (84.2%) seeing a peer educator more than three times. Just over a quarter (28.2%) of FSW in Colombo have been reach according to the GARP prevention programmes indicator which is a composite indicator of having received free condoms in the last 12 months and know where to go for an HIV test.

A FSW peer educator mentioned another group of FSW that is not covered by her programme. They come from various places in the surrounding areas, and operate just outside Kandy. They come to Kandy to bring their children to school and then hang around until school is over. She thinks that network is bigger than the network she is part of. She sees them often, but this group is more involved in occasional sex than the group where she serves as peer educator.

**Table 75: Programme coverage, FSW Kandy**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Contact with a health peer educator in the community in the last 6 months</b>				
Yes	69/354	19.5	17.2	12.0 – 21.9
<b>Number of times of contact with a health peer educator in the last 6 months</b>				
1	6/69	8.7	7.5	2.7 – 12.0
2	8/69	11.6	8.3	2.8 – 13.1
≥ 3	55/69	79.7	84.2	78.1 – 91.3

Table 75: Programme coverage, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Services or information received from the health peer educator</b> (multiple answers possible)				
General HIV/STI prevention and transmission information	66/69	95.7	95.2	90.5 – 99.8
Condoms	61/69	88.4	88.6	80.3 – 97.1
Referral for STI treatment	9/69	13.0	11.5	5.7 – 17.1
Referral for VCT	1/69	1.3	1.0	0 – 2.5
Medical visit	3/69	4.3	4.8	0.2 – 9.6
<b>Reached with HIV prevention programs</b> (received free condoms in the last 12 months and know where HIV testing can be obtained)				
Yes	181/605	29.9	28.2	24.2 – 32.1

Bivariate analysis shows that street-based FSW are more in touch with peer educators (37.7%) than brothel-based (27.5%) and massage parlour-based (13.0%) FSW (Table 76).

Table 76: Programme coverage bivariate analysis, FSW Kandy

Places where they normally find clients	Number of times of contact with a health peer educator in the last 6 months			Total N (%)
	1 n (%)	2 n (%)	≥ 3 n (%)	
Street park, or public transport	1 (16.7)	1 (12.5)	24 (43.6)	26 (37.7)
Massage parlour, Spa or Salon	0 (0)	1 (12.5)	8 (14.5)	9 (13.0)
Brothel	4 (66.7)	3 (37.5)	12 (21.8)	19 (27.5)
Other	1 (16.7)	3 (37.5)	11 (20.0)	15 (21.7)
<b>Total</b>	<b>6 (100)</b>	<b>8 (100)</b>	<b>55 (100)</b>	<b>69 (100)</b>

### 8.3.22 Alcohol and drug use

While over half (56.1%) of FSW have ever consumed alcohol, not many drink it on a regular basis, with most drinking less than once a week (62.9%) (Table 77). No FSW in Kandy reported injecting drugs in the last 12 months or use of any other drug in the past 6 months (data not shown).

Table 77: Alcohol and drug use, FSW Kandy

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever consumed alcohol</b>				
Yes	190/353	53.8	56.1	50.2 – 62.3

Table 77: Alcohol and drug use, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Alcohol consumption in the last 4 weeks</b>				
Never drink alcohol	3/189	1.6	1.0	0 – 2.2
Never in the last 4 weeks	37/189	19.6	18.9	11.3 – 26.4
Once a week	31/189	16.4	15.8	10.0 – 21.4
Less than once a week	115/189	60.8	62.9	54.8 – 71.4
Every day	2/189	1.1	1.2	0 – 3.2
Don't know	1/189	0.5	0.2	0.1 – 0.2
<b>Injected drugs in the last 12 months</b>				
Yes	0/354	-	-	-

### 8.3.23 Media usage

TV, newspapers and radio are the more frequent media outlets used by FSW in Kandy (79.6%, 50.2%, and 77.4% watch, read and listen to the TV, newspaper and radio at least once a week, most days or every day, respectively); compared with the internet, which is seldom accessed (12.6% access the internet once a week, most days, or daily) (Table 78). Most FSW in Kandy have a mobile phone (89.3%), communicate with FSW peers using a mobile (93.5%) and would be interested in receiving HIV and health related text messages (80.9%).

Table 78: Media usage, FSW Kandy

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Radio</b>				
Never	84/354	23.7	20.7	16.0 – 24.8
Once a month	0/354	-	-	-
Once a week	2/354	0.6	0.3	0 – 0.7
Most days	50/354	14.1	13.2	9.1 – 17.1
Every day	212/354	59.9	64.2	59.1 – 70.1
Don't know	6/354	1.7	1.6	0.4 – 2.8
<b>TV</b>				
Never	78/354	22.0	18.6	14.0 – 22.6
Once a month	0/354	-	-	-
Once a week	0/354	-	-	-
Most days	84/354	23.7	23.9	19.0 – 29.0
Every day	186/354	52.5	55.7	50.0 – 62.0
Don't know	6/354	1.7	1.8	0.3 – 3.4
<b>Newspaper</b>				
Never	170/354	48.0	47.7	40.8 – 54.6
Once a month	3/354	0.8	0.9	0 – 1.8
Once a week	19/354	5.4	4.1	2.2 – 5.8
Most days	69/354	19.5	18.5	14.1 – 22.8
Every day	88/354	24.9	27.6	21.9 – 33.8
Don't know	5/354	1.4	1.2	0.2 – 2.1

Table 78: Media usage, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Internet</b>				
Never	312/352	88.6	87.4	83.1 – 91.6
Once a month	0/352	-	-	-
Once a week	2/352	0.6	0.5	0 – 0.9
Most days	20/352	5.7	6.4	3.2 – 9.7
Every day	18/352	5.1	5.7	2.6 – 8.8
<b>Has a mobile phone</b>				
Yes	319/354	90.1	89.3	85.1 – 93.5
<b>Uses mobile phone to communicate with other FSW</b>				
Yes	293/318	92.1	93.5	90.7 – 96.6
<b>Interested in receiving HIV and health-related text messages</b>				
Yes	256/319	80.3	80.9	76.3 – 85.7
<b>Interested in attending learning activities</b>				
Yes	270/354	76.3	76.3	71.5 – 81.1

### 8.3.24 Network size and multiplier questions

FSW in Kandy estimate the average number of FSW living in Kandy is 942, of whom an estimated average of 869 are above the age of 18 (Table 79). With regard to multiplier questions, a third (32.9%) have been treated at an STD clinic in 2014. As already mentioned, due to issues with catchment area in the STD programme data, multiplier method for PSE could not have been undertaken.

Table 79: Network size and multiplier questions, FSW Kandy

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Estimation of the number of FSW who live in Kandy</b>	342/354			
Mean	1024.3	-	942.5	-
SD	499.2	-	457.7	-
Median	900.0	-	810.0	-
Range	50 – 3000	-	-	-
<b>Estimation of the number of FSW older than 18 who live in Kandy</b>				
Mean	951.1	-	869.3	-
SD	473.7	-	433.9	-
Median	850.0	-	750.0	-
Range	20 – 2850	-	-	-
<b>Number of FSW older than 18 seen in the last month*</b>				
Mean	5.84	-	4.16	-
SD	3.7	-	2.87	-
Median	5.0	-	3.0	-
Range	1 – 20	-	-	-
<b>Tested for HIV at Government STD (NSACP) clinic in 2014</b>				
Yes	92/353	26.1	27.2	21.9 – 32.6

Table 79: Network size and multiplier questions, FSW Kandy (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Names of NSCAP clinics visited in 2014<sup>50</sup></b>				
STD clinic – Kandy	71/354	20.1	20.3	15.5 – 25.1
STD clinic – Colombo	9/354	2.5	3.2	0.8 – 5.7
STD clinic – Galle	1/354	0.3	0.3	0 – 0.7
STD clinic – Anuradhapura	2/354	0.6	0.6	0 – 1.5
STD clinic – Kalubowila	1/354	0.3	0.4	0 – 0.9
STD clinic – Ragama	3/354	0.8	0.9	0.05 – 1.6
STD clinic – Gampaha	1/354	0.3	0.4	0 – 0.9
STD clinic – Kegalle	1/354	0.3	0.2	0 – 0.5
STD clinic – Kurunegala	3/354	0.8	0.9	0.2 – 1.6

#### 8.4 FSW Aggregate data

In total, 1,261 FSW were surveyed across three districts as follows, with 605 in Colombo, 302 in Galle, and 354 in Kandy Table 80: FSW Aggregate IBBS data from Colombo, Galle and Kandy. The mean population estimate is 10,115 FSW, with 6,157 in Colombo, 1,754 in Galle, and 2,204 in Kandy. Overall, the HIV prevalence amongst FSW in Sri Lanka is just over one percent (1.03%), and the active syphilis prevalence is just under one percent (0.98%). While condom usage at last sex with a client is high (93.0%), all other GARP indicators are low, with composite knowledge of HIV/ AIDS at 34.9%, testing in the last 12 months and receiving the result at 35.0%, and composite prevention programmes indicator at 29.9%. It is important to note that the three RDS surveys comprise distinct populations, hence aggregate data is only provided for key variables of interest. These aggregates should be interpreted as averages, which have accounted for differences in population sizes. As Colombo has the highest population size estimate, it has the largest weight and influences the overall estimate the most.

Table 80: FSW Aggregate IBBS data from Colombo, Galle and Kandy

Characteristic	Overall prevalence/frequency estimate		
	%	SE*	95% CI**
<b>HIV (Colombo and Galle)</b>	1.03	0.0035	0.3 – 1.7
<b>HIV (All)***</b>	0.81	-	-
<b>Syphilis - Active (All)***</b>	0.98	-	-
<b>Composite knowledge</b>	34.9	0.0145	32.1 – 37.8
<b>Used a condom at last sex with a client</b>	93.0	0.0079	91.4 – 94.5
<b>Tested for HIV in the past 12 months and knows result</b>	35.0	0.0154	32.0 – 35.0
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>	37.7	0.016	34.5 – 40.8
<b>Reached with HIV prevention programs</b> (received free condoms and know where HIV testing can be obtained)	29.9	0.0148	26.9 – 32.8

\*Standard Error (SE)

<sup>50</sup> Among 114 participants who said they tested for HIV at an NSSCP clinic, 113 (99.1%) also provided the name of the clinic and date of testing. Among them, 21 (18.6%) visited the clinic before 2014, and the remaining 92 participants in 2014.

\*\*SE and confidence intervals do not account for variability in population size estimates, making them smaller than they should be.

\*\*\* SE and CI cannot be calculated for all, as there are HIV cases only in Colombo and Galle, and active syphilis cases only in Colombo. Current methods can calculate confidence intervals when there is at least a single case in all locations.

## 8.5 FSW multivariate analysis

Using a logistic regression analysis, comparison of factors associated with the following outcomes was undertaken: using a condom at last sex, having an HIV test in the past 12 months and knowing the results, and reached with prevention programs. The variables used as predictors/correlates are presented in the tables. Individualized RDS weights for bivariate (unadjusted OR) and multivariate (adjusted OR) were exported from RDS-Analyst using a Gile'sSS estimator. Proportions (n/N) and percentage (%) among groups are shown without RDS weights. Cases with missing values were excluded from the analysis.

### 8.5.1 FSW Colombo

Amongst FSW in Colombo, having an HIV test in the last 12 months is most strongly associated with the number of paying partners in the last 20 days (21-30 partners: AOR 4.48, 31+ partners: AOR 4.17, 11-20 partners: AOR 2.55). Furthermore, those with a higher level of education are less likely to have had an HIV test in the last 12 months and received the result (AOR 0.64).

**Table 81: Factors associated with having an HIV test in the past 12 months and knowing the result, FSW Colombo**

Characteristic	HIV test in the past 12 months		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	261/605	43.1		
<b>Age</b>				
18 – 24	24/69	34.8	1.0	1.0
25 – 34	76/177	42.9	0.98 (0.82 – 1.66)	1.17 (0.97 – 1.41)
35 – 44	73/159	45.9	1.24* (1.04 – 1.48)	1.49*** (1.23 – 1.81)
≥ 45	88/200	44.0	0.99 (0.83 – 1.17)	1.37** (1.13 – 1.67)
<b>Level of education</b>				
≤ Grade 10	224/507	44.2	1.0	1.0
≥ Passed O/L	37/98	37.8	0.81** (0.70 – 0.93)	0.64*** (0.54 – 0.74)
<b>Monthly income</b>				
≤20.000	87/228	38.2	1.0	1.0
>20.000	174/374	46.5	1.52*** (1.37 – 1.69)	0.91 (0.79 – 1.05)
<b>Number of paying partners in the last 30 days</b>				
0-10	35/129	27.1	1.0	1.0
11-20	64/156	41.0	2.32*** (1.99 – 2.72)	2.55*** (2.14 – 3.05)
21-30	77/153	50.3	3.47*** (2.97 – 4.06)	4.48*** (3.71 – 5.42)
31+	84/159	52.8	3.32*** (2.83 – 3.89)	4.17*** (3.44 – 5.05)
<b>Had sex with regular partner 30 days</b>	167/375	44.5	1.17** (1.06 – 1.30)	0.92 (0.82 – 1.04)
<b>Composite GARP knowledge (all correct)</b>	97/195	49.7	1.66*** (1.49 – 1.85)	1.8*** (1.60 – 2.04)



Table 81: Factors associated with having an HIV test in the past 12 months and knowing the result, FSW Colombo (Continued)

Characteristic	HIV test in the past 12 months		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
Received free condoms from NGOs or a health care centre in the last 12 months	125/231	54.1	1.90*** (1.71 – 2.11)	1.53*** (1.35 – 1.73)
Contact with a health peer educator in the community in the last 6 months	66/104	63.5	2.31*** (2.01 – 2.66)	2.0*** (1.71 – 2.35)
Condom use with last paying partner	249/567	43.9	2.29*** (1.80 – 2.92)	1.26 (0.96 – 1.67)

\* p<0.05 \*\* p<0.01 \*\*\* p<0.001

Independent factors associated with using a condom with last paying partner include number of paying partners in the last 30 days (0-10 partners: AOR 16.28, 21-30 partners: AOR 13.1, 31+ partners: AOR 8.60). Those who have a higher level of knowledge around HIV are also more likely to have used a condom at last sex with a paying partner (AOR 4.82).

Table 82: Factors associated with using a condom with last paying partner, FSW Colombo

	Condom use with last paying partner		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	567/605	93.9	-	-
<b>Age</b>				
18 – 24	64/69	92.8	1.0	1.0
25 – 34	173/176	98.3	4.51* (1.05 – 19.40)	5.32* (1.15 – 24.62)
35 – 44	149/159	93.7	1.16 (0.38 – 3.54)	1.45 (0.42 – 4.99)
≥ 45	181/200	90.5	0.74 (0.27 – 2.08)	1.33 (0.39 – 4.58)
<b>Level of education</b>				
≤ Grade 10	476/507	93.9	1.0	1.0
≥ Passed O/L	91/97	93.8	0.99 (0.40 – 2.44)	0.60 (0.21 – 1.73)
<b>Monthly income</b>				
≤20.000	207/228	90.8	1.0	1.0
>20.000	357/373	95.7	2.26* (1.15 – 4.44)	0.58 (0.21 – 1.66)
<b>Number of paying partners in the last 30 days</b>				
0-10	106/129	82.2	1.0	1.0
11-20	153/156	98.1	11.07*** (3.24 – 37.8)	16.28*** (4.2 – 62.48)
21-30	148/153	96.7	6.42*** (2.37 – 17.44)	13.1*** (3.71 – 46.22)
31+	153/158	96.8	6.64 (2.45 – 18.02)	8.60*** (2.44 – 30.35)
<b>Had sex with regular partner 30 days</b>	348/374	93.0	0.62 (0.29 – 1.30)	0.31* (0.12 – 0.76)
<b>Composite GARP knowledge (all correct)</b>	190/194	97.9	4.17** (1.46 – 11.94)	4.82** (1.49 – 15.64)

Table 82: Factors associated with using a condom with last paying partner, FSW Colombo (Continued)

	Condom use with last paying partner		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
Received free condoms from NGOs or a health care centre in the last 12 months	221/231	95.7	1.62 (0.76 – 3.43)	1.34 (0.53 – 3.39)
Contact with a health peer educator in the community in the last 6 months	101/104	97.1	2.46 (0.74 – 8.16)	1.78 (0.43 – 7.28)
HIV test in the past 12 months and knows result	249/260	95.8	1.85 (0.90 – 3.82)	1.06 (0.44 – 2.56)

\* p<0.05 \*\* p<0.01 \*\*\* p<0.001

Age, level of education and income appear to be the independent factors associated with prevention programme reach, with FSW older than 25 more being more likely to have been given condoms in the last 12 months and to know where to get an HIV test (aged 45 and over: AOR 4.96, aged 35-44: AOR 3.17), while more educated FSW are less likely to have been reached by prevention programmes.

Table 83: Factors associated with prevention programmes reach (been given condoms in the last 12 months and know where to go for an HIV test), FSW Colombo

	Reached by prevention program		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	181/605	29.9	-	-
<b>Age</b>				
18 – 24	10/69	14.5	1.0	1.0
25 – 34	39/177	22.0	1.55*** (1.21 – 1.98)	1.4*** (1.09 – 1.80)
35 – 44	54/159	34.0	3.31*** (2.61 – 4.21)	3.17*** (2.48 – 4.06)
≥ 45	78/200	39.0	4.21*** (3.33 – 5.32)	4.96*** (3.88 – 6.36)
<b>Level of education</b>				
≤ Grade 10	161/507	31.8	1.0	1.0
≥ Passed O/L	20/98	20.4	0.65*** (0.55 – 0.76)	0.69*** (0.58 – 0.82)
<b>Monthly income</b>				
≤20.000	67/228	29.4	1.0	1.0
>20.000	114/374	30.5	1.01 (0.90 – 1.14)	1.72*** (1.48 – 2.01)
<b>Number of paying partners in the last 30 days</b>				
0-10	40/129	31.0	1.0	1.0
11-20	49/156	31.4	0.87 (0.74 – 1.01)	0.91 (0.76 – 1.07)
21-30	38/153	24.8	0.63 (0.54 – 0.75)	0.65 (0.54 – 0.79)
31+	50/159	31.4	0.94 (0.80 – 1.10)	1.21 (1.0 – 1.46)
<b>Had sex with regular partner 30 days</b>	118/375	31.5	0.94 (0.83 – 1.05)	0.95 (0.83 – 1.07)

\* p<0.05 \*\* p<0.01 \*\*\* p<0.001

## 8.5.2 FSW Galle

Factors associated with having had an HIV test amongst FSW in Galle include contact with a peer educator in the last 12 months (OR 13.02), and older age (aged 25-34: AOR 5.55, aged 35-44: AOR 5.29, and aged 45 or more: AOR 6.45). Interestingly, there appears to be a non-linear relationship between number of clients in the last 30 days and HIV testing. More specifically, FSW who have had 11-20 paying partners in the last 30 days are less likely, and those with 21 or more clients more likely than FSW who have had 10 or fewer than 10 clients in the last 30 days to have had an HIV test in the last 12 months and received the result.

**Table 84: Factors associated with having an HIV test in the past 12 months and knowing the result, FSW Galle**

	HIV test in the past 12 months		Unadjusted OR (95% CI)	Adjusted OR (95% CI)
	n/N	%		
<b>Total</b>	72/302	23.8	-	-
<b>Age</b>				
18 – 24	2/19	10.5	1.0	1.0
25 – 34	33/113	29.2	4.42*** (2.39 – 8.17)	10.55*** (4.92 – 22.63)
35 – 44	19/101	18.8	2.22* (1.19 – 4.16)	5.29*** (2.41 – 11.61)
≥ 45	18/69	26.1	3.16*** (1.69 – 5.94)	6.45*** (2.87 – 14.49)
<b>Level of education</b>				
≤ Grade 10	50/205	24.4	1.0	1.0
≥ Passed O/L	22/97	22.7	0.75* (0.59 – 0.97)	0.90 (0.66 – 1.24)
<b>Monthly income</b>				
≤20,000	21/107	19.6	1.0	1.0
>20,000	48/177	27.1	1.54** (1.20 – 1.98)	1.21 (0.81 – 1.80)
<b>Number of paying partners in the last 30 days</b>				
0-10	27/105	25.7	1.0	1.0
11-20	12/101	11.9	0.45*** (0.33 – 0.61)	0.62* (0.40 – 0.94)
21-30	23/64	35.9	1.99*** (1.49 – 2.67)	3.19*** (1.99 – 5.10)
31+	9/25	36.0	2.49*** (1.69 – 3.68)	4.39*** (2.43 – 7.93)
<b>Had sex with regular partner 30 days</b>	12/46	26.1	1.29 (0.96 – 1.73)	2.08*** (1.46 – 2.98)
<b>Composite GARP knowledge (all correct)</b>	28/84	33.3	1.74*** (1.37 – 2.21)	1.32 (0.97 – 1.81)
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>	42/143	29.4	1.24 (0.99 – 1.56)	1.27 (0.92 – 1.75)
<b>Contact with a health peer educator in the community in the last 6 months</b>	29/45	64.4	10.32*** (7.64 – 13.94)	13.03*** (8.87 – 19.16)
<b>Condom use with last paying partner</b>	70/269	26.0	5.39*** (2.98 – 9.72)	-

\* p<0.05 \*\* p<0.01 \*\*\* p<0.001

Note: condom use was not included in the multivariate model because it had too few outcomes (model did not converge).

Amongst FSW in Galle, the multivariate model showed that a higher monthly income (AOR 5.10),

more paying partners in the last 30 days (AOR 3.55), and higher composite HIV knowledge (OR 3.52) were associated with condom usage with last paying partner. Those FSW who had sex with a regular paying partner in the last 30 days were less likely to use a condom with the last paying partner (AOR 0.26).

**Table 85: Factors associated with using a condom with last paying partner, FSW Galle**

	Condom use with last paying partner		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	269/302	89.1	-	-
<b>Age</b>				
<35	124/132	93.9	1.0	1.0
≥35	145/170	85.3	0.34*** (0.24 – 0.47)	0.79 (0.5 – 1.24)
<b>Level of education</b>				
≤ Grade 10	185/205	90.2	1.0	1.0
≥ Passed O/L	84/97	86.6	0.79 (0.59 – 1.07)	1.91** (1.19 – 3.04)
<b>Monthly income</b>				
≤20.000	86/107	80.4	1.0	1.0
>20.000	169/177	95.5	7.33*** (5.11 – 10.54)	5.10*** (3.06 – 8.53)
<b>Number of paying partners in the last 30 days</b>				
0-10	84/105	80.0	1.0	1.0
11+	181/190	95.3	5.85*** (4.22 – 8.11)	3.55*** (2.17 – 5.79)
<b>Had sex with regular partner 30 days</b>	38/46	82.6	0.46*** (0.33 – 0.65)	0.26*** (0.16 – 0.40)
<b>Composite GARP knowledge (all correct)</b>	80/84	95.2	3.49*** (2.25 – 5.41)	3.52*** (1.92 – 6.44)
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>	133/143	93.0	2.00*** (1.47 – 2.74)	2.19*** (1.46 – 3.29)
<b>Contact with a health peer educator in the community in the last 6 months</b>	41/45	91.1	1.35 (0.86 – 2.13)	2.10* (1.04 – 4.23)
<b>Condom use with last paying partner</b>	70/72	97.2	5.39*** (2.98 – 9.72)	-

\* p<0.05 \*\* p<0.01 \*\*\* p<0.001

Note: Age and number of partners was dichotomized, as there were no outcomes in some of the groups. HIV test variable had too few outcomes for the multivariate model to converge, and as such it was excluded.

Independent factors associated with prevention programme reach included higher level of education (passed O/L or higher: AOR 1.84) and age between 25 and 34 years(AOR 1.53). FSW who have had a higher number of paying partners in the last 30 days were less likely to have access to prevention programmes (21-30 partners: AOR 0.19, 31 or more partners: AOR 0.15).

**Table 86: Factors associated with prevention programmes reach (been given condoms in the last 12 months and know where to go for an HIV test), FSW Galle**

	Reached by prevention program		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	269/302	89.1	-	-
<b>Age</b>				
18 – 24	7/19	36.8	1.0	1.0
25 – 34	47/112	42.0	1.39 (0.95 – 2.03)	1.53* (1.01 – 2.32)
35 – 44	36/101	35.6	0.97 (0.66 – 1.41)	0.72 (0.47 – 1.10)
≥ 45	32/69	46.4	1.59 (1.07 – 2.34)	1.15 (0.73 – 1.81)
<b>Level of education</b>				
≤ Grade 10	84/204	41.2	1.0	1.0
≥ Passed O/L	38/97	39.2	1.24 (1.01 – 1.53)	1.84*** (1.45 – 2.33)
<b>Monthly income</b>				
≤20.000	51/106	48.1	1.0	1.0
>20.000	66/177	37.3	0.73** (0.60 – 0.90)	1.24 (0.95 – 1.60)
<b>Number of paying partners in the last 30 days</b>				
0-10	48/104	46.2	1.0	1.0
11-20	53/101	52.5	1.19 (0.95 – 1.48)	1.15 (0.87 – 1.51)
21-30	13/64	20.3	0.29*** (0.21 – .40)	0.19*** (0.13 – 0.27)
31+	5/25	20.0	0.25*** (0.16 – 0.39)	0.15*** (0.9 – 0.26)
<b>Had sex with regular partner 30 days</b>	19/46	41.3	0.88 (0.68 – 1.13)	0.81 (0.61 – 1.07)

\* p<0.05 \*\* p<0.01 \*\*\* p<0.001

### 8.5.3 FSW Kandy

Having had an HIV test in the past 12 months and knowing the result is positively associated with contact with a health peer educator (AOR 3.62) and composite knowledge around HIV (AOR 2.95). More specifically, those who had contact with a peer educator and those who have higher comprehensive HIV-related knowledge, are more likely to have an HIV test and receive their result. However, considering the way the current BCC programme is implemented, where peer educators bring FSW for testing, the relationship between HIV testing and contact with a peer educator should be interpreted with caution.

**Table 87: Factors associated with having an HIV test in the past 12 months and knowing the result, FSW Kandy**

	HIV test in the past 12 months		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	95/354	26.8		
<b>Age</b>				
18 – 24	5/31	16.1	1.0	1.0
25 – 34	36/170	21.2	1.94** (1.24 – 3.03)	0.9 (0.55 – 1.47)
35 – 44	35/107	32.7	3.21*** (2.04 – 5.05)	1.82* (1.12 – 2.94)
≥ 45	19/46	41.3	4.18*** (2.57 – 6.81)	1.32 (0.75 – 2.33)

Table 87: Factors associated with having an HIV test in the past 12 months and knowing the result, FSW Kandy (Continued)

	HIV test in the past 12 months		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Level of education</b>				
≤ Grade 10	58/196	29.6	1.0	1.0
≥ Passed O/L	37/158	23.4	0.70*** (0.58 – 0.85)	0.88 (0.70 – 1.10)
<b>Monthly income</b>				
≤20.000	27/61	44.3	1.0	1.0
>20.000	68/293	23.2	0.47*** (0.37 – 0.59)	1.39 (0.97 – 2.00)
<b>Number of paying partners in the last 30 days</b>				
1-10	40/97	41.2	1.0	1.0
11-20	49/133	30.1	0.76* (0.61 – 0.94)	0.62** (0.48 – 0.81)
21-30	9/87	10.3	0.23*** (0.17 – 0.32)	0.14*** (0.10 – 0.212)
31+	6/37	16.2	0.28*** (0.18 – 0.44)	0.19*** (0.11 – 0.32)
<b>Had sex with regular partner 30 days</b>	34/90	22.4	0.62*** (0.50 – 0.78)	0.50*** (0.38 – 0.64)
<b>Composite GARP knowledge (all correct)</b>	55/183	30.1	1.71*** (1.41 – 2.07)	2.95*** (2.29 – 3.80)
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>	44/116	37.9	1.99*** (1.63 – 2.42)	1.13 (0.84 – 1.53)
<b>Contact with a health peer educator in the community in the last 6 months</b>	36/69	52.2	4.03*** (3.2 – 5.08)	3.62*** (2.56 – 5.10)
<b>Condom use with last paying partner</b>	88/338	26.0	0.54** (0.37 – 0.78)	0.55* (0.33 – 0.93)

\* p<0.05 \*\* p<0.01 \*\*\* p<0.001

Independent factors associated with condom usage with last client among FSW in Kandy include higher composite knowledge (AOR 5.91), higher monthly income (AOR 2.6), receiving condoms in the last 12 months (AOR 2.33) and higher level of education (AOR 1.96). FSW who had sex with a regular partner in the last 30 days are less likely to have used a condom at last sex with a client (AOR 0.20).

Table 88: Factors associated with using a condom with last paying partner, FSW Kandy

	Condom use with last paying partner		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	338/354	95.5		
<b>Age</b>				
18 – 24	30/31	96.8	1.0	1.0
25 – 34	167/170	98.2	1.47 (0.55 – 3.96)	1.28 (0.44 – 3.7)
35 – 44	100/107	93.5	0.27** (0.11 – 0.67)	0.57 (0.21 – 1.53)
≥ 45	41/46	89.1	0.16*** (0.06 – 0.42)	0.46 (0.16 – 1.35)
<b>Level of education</b>				
≤ Grade 10	184/196	93.9	1.0	1.0
≥ Passed O/L	154/158	97.5	3.47*** (2.23 – 5.39)	1.96* (1.15 – 3.34)

Table 88: Factors associated with using a condom with last paying partner, FSW Kandy (Continued)

	Condom use with last paying partner		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Monthly income</b>				
≤20.000	51/61	83.6	1.0	1.0
>20.000	287/293	98.0	6.90*** (4.75 – 10.02)	2.6** (1.40 – 4.84)
<b>Number of paying partners in the last 30 days</b>				
0-20	217/230	94.3	1.0	1.0
21+	121/124	97.6	2.59*** (1.54 – 4.36)	1.06 (0.49 – 2.30)
<b>Had sex with a regular partner in the last 30 days</b>	84/90	93.3	0.46*** (0.32 – 0.67)	0.20*** (0.12 – 0.33)
<b>Composite GARP knowledge (all correct)</b>	180/183	98.4	3.66*** (2.39 – 5.61)	5.91*** (2.70 – 12.97)
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>	111/116	95.7	0.94 (0.61 – 1.47)	2.33* (1.05 – 5.16)
<b>Contact with a health peer educator in the community in the last 6 months</b>	65/69	94.2	0.68 (0.44 – 1.04)	0.72 (0.32 – 1.62)
<b>HIV test in the past 12 months and knows result</b>	88/95	92.6	0.54* (0.37 – 0.78)	0.60 (0.34 – 1.05)

\* p<0.05 \*\* p<0.01 \*\*\* p<0.001

FSW who had 31 or more partners in the last 30 days (AOR 5.02), and those who are older (ages 25-34: AOR 3.82, ages 35-44: AOR 3.71) are more likely to have been reached by prevention programmes

Table 89: Factors associated with prevention programmes reach (been given condoms in the last 12 months and know where to obtain an HIV test), FSW Kandy

	Reached by prevention program		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	91/354	25.7		
<b>Age</b>				
18 – 24	4/31	12.9	1.0	1.0
25 – 34	41/170	24.1	2.15 (0.71 – 6.49)	3.82* (1.14 – 12.79)
35 – 44	30/107	28.0	2.63 (0.85 – 8.15)	3.71* (1.05 – 13.1)
≥ 45	16/46	34.8	3.60* (1.07 – 12.11)	3.39 (0.83 – 13.8)
<b>Level of education</b>				
≤ Grade 10	48/196	24.5	1.0	1.0
≥ Passed O/L	43/158	27.2	1.15 (0.72 – 1.86)	1.63 (0.94 – 2.82)
<b>Monthly income</b>				
≤20.000	34/61	55.7	1.0	1.0
>20.000	57/293	19.5	0.19*** (0.11 – 0.34)	0.13*** (0.06 – 0.28)

Table 89: Factors associated with prevention programmes reach (been given condoms in the last 12 months and know where to obtain an HIV test), FSW Kandy (Continued)

	Reached by prevention program		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Number of paying partners in the last 30 days</b>				
0-10	32/97	33.0	1.0	1.0
11-20	21/133	15.8	0.38* (0.20 – 0.72)	0.85 (0.39 – 1.85)
21-30	23/87	26.4	0.73 (0.39 – 1.38)	1.78 (0.79 – 4.03)
31+	15/37	40.5	1.39 (0.63 – 3.02)	5.02** (1.82 – 13.90)
<b>Had sex with regular partner 30 days</b>	20/90	22.2	0.78 (0.44 – 1.37)	0.83 (0.43 – 1.58)

\* p<0.05 \*\* p<0.01 \*\*\* p<0.001





# **Men who have Sex with Men**



## 9. Men who have sex with men

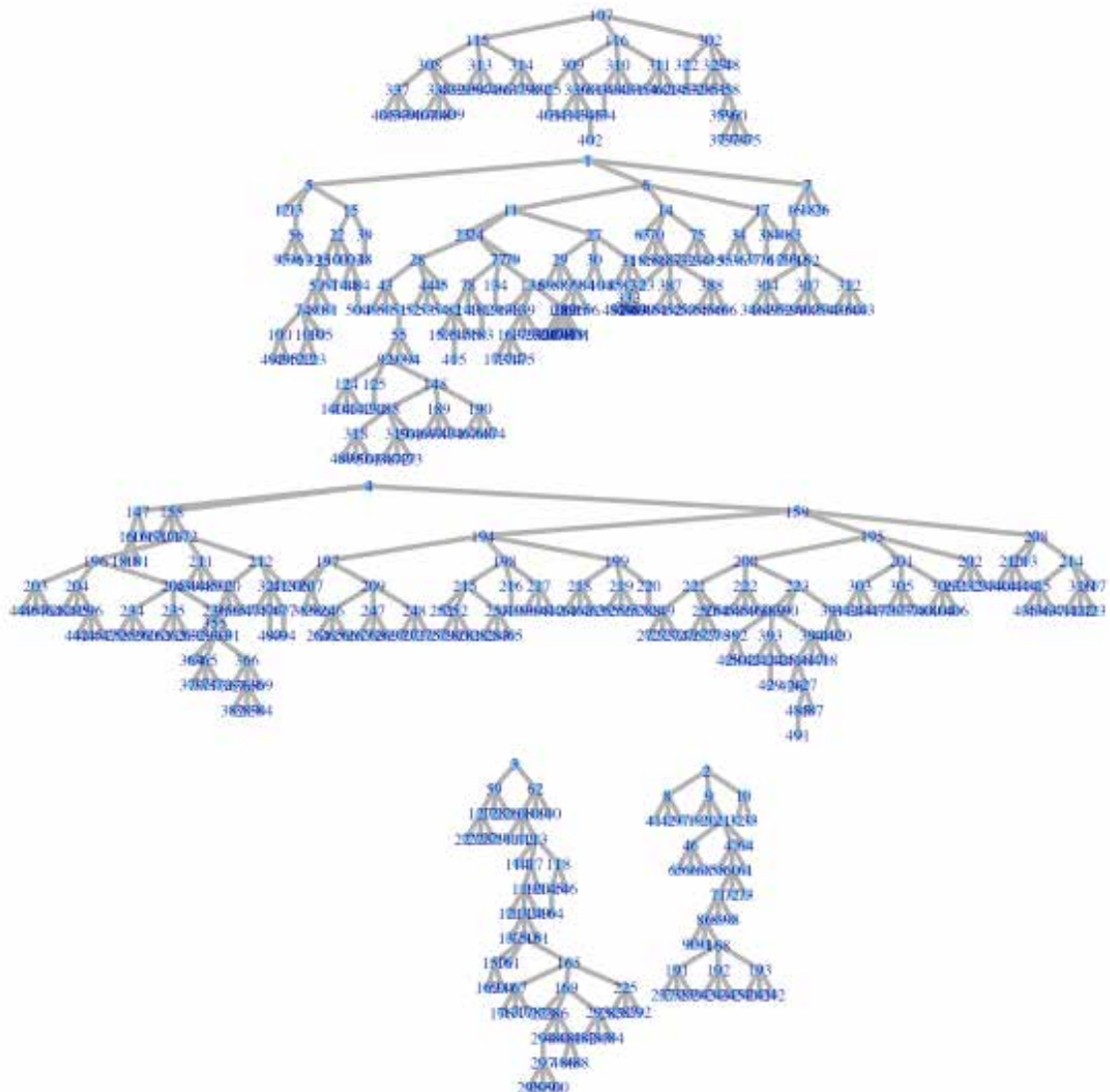
### 9.1 Colombo

A total of 504 MSM were recruited in Colombo, surpassing the target sample size of n=500. A total of five seeds were recruited through existing networks with NGO / outreach workers and through the FA. All MSM respondents in Colombo were surveyed at the central Colombo data collection site.

#### 9.1.1 Network properties

In Figure 12 the recruitment tree for MSM in Colombo is illustrated, showing clearly that one seed resulted in a larger recruitment chain, compared with the others. The network size ranged from zero to 400, which were then adjusted to maximum values within the 95th percentile, zeros were increased to 1, and missing values (28.6%) were imputed with the median of 6. In total, 13 waves were reached. There was a strong association between the network size question in the questionnaire and the separate network size form completed by the coupon manager, one month in to data collection ( $r = 0.61$ ;  $p < 0.001$ ).

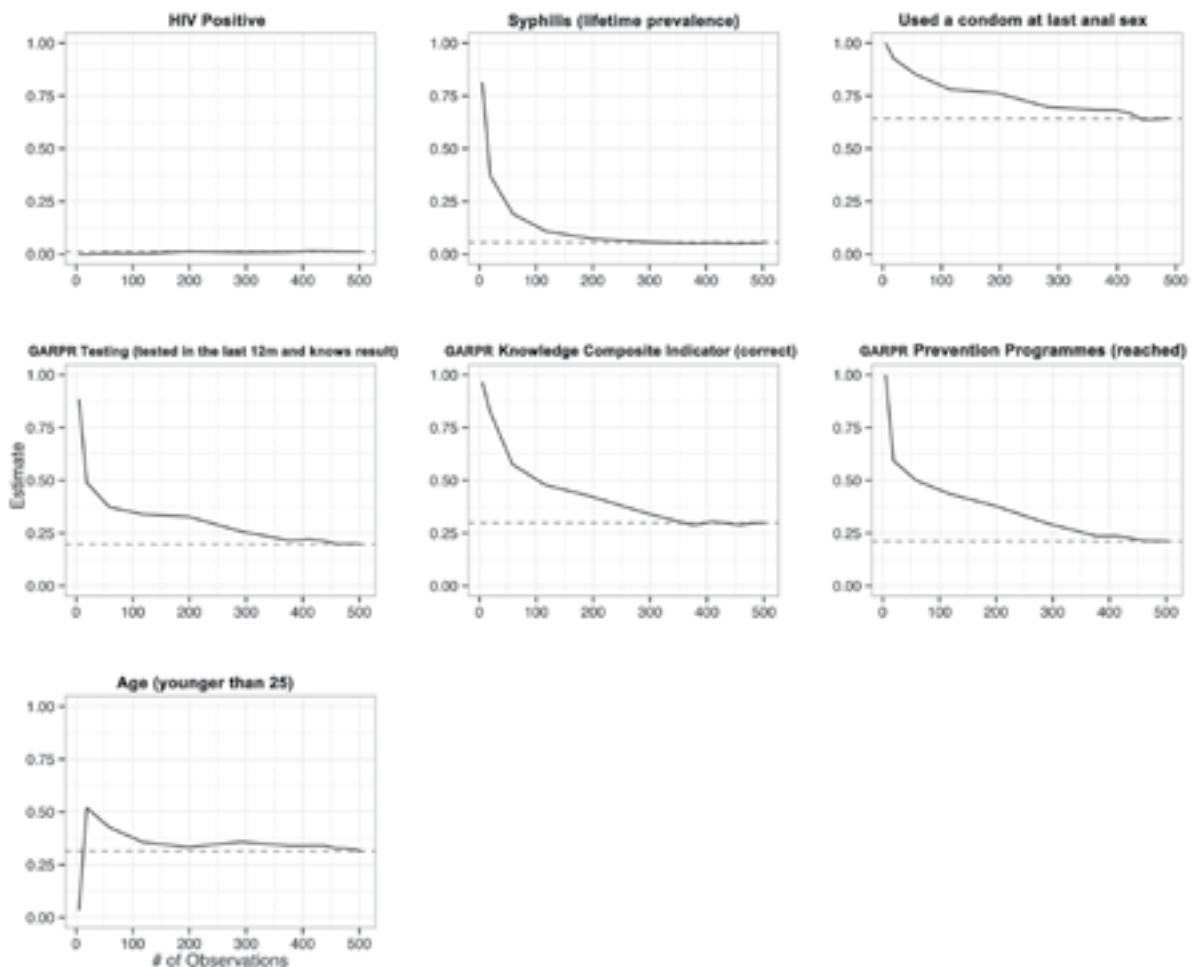
Figure 12: Recruitment tree, MSM Colombo



### 9.1.2 Convergence

Convergence has been clearly reached on 3 of 7 key indicators (age, HIV status, syphilis status) (Figure 13). Remaining indicators related to knowledge and behaviour are nearly converging - the population estimates are becoming stable around the 400<sup>th</sup> participant.

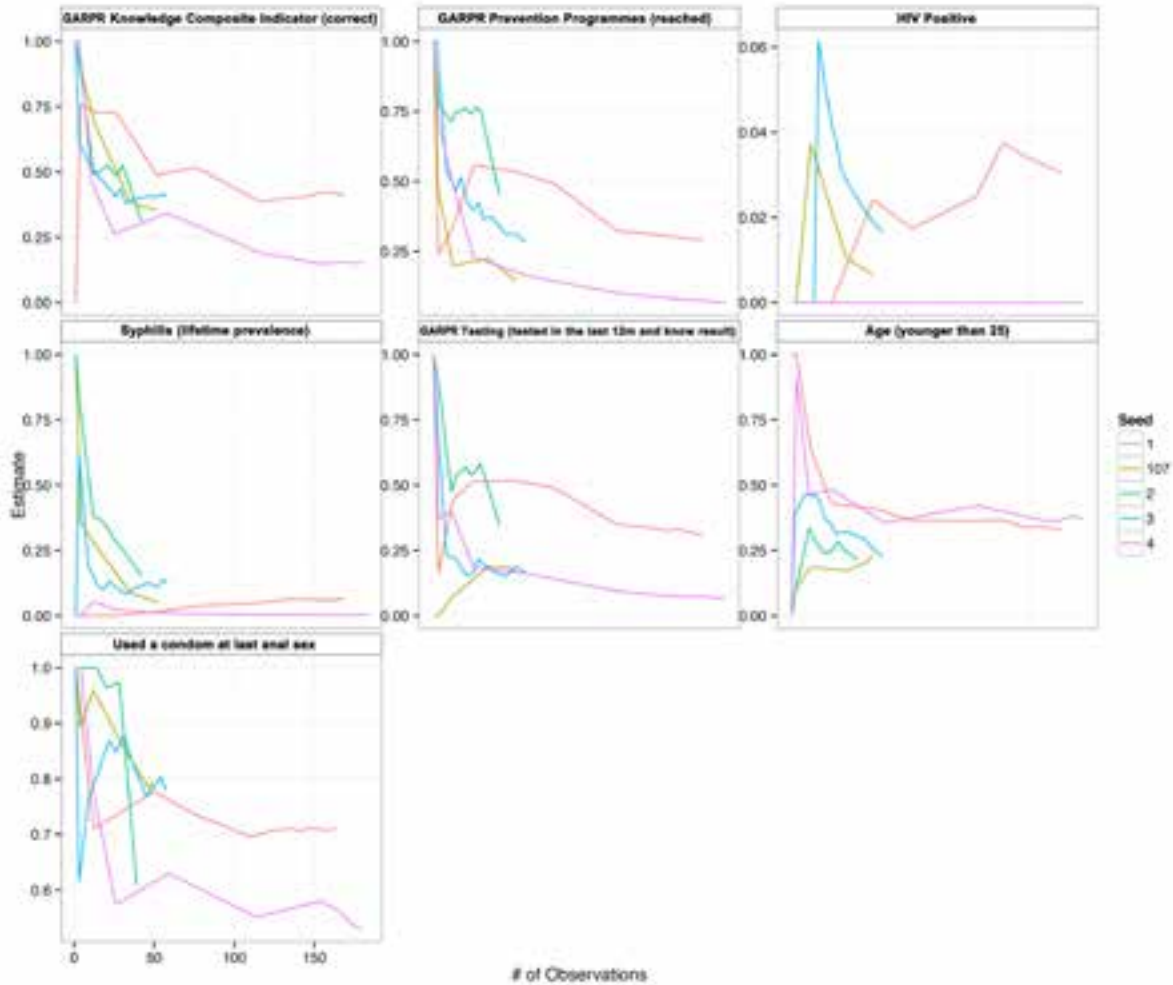
**Figure 13: Convergence plots, MSM Colombo**



### 9.1.3 Bottleneck plots

Within 4 key indicators (knowledge, testing rate, given condom and use of condom) two main seeds have reached different subpopulations (Figure 14). One seed reached a population with lower values on those key indicators, e.g. lower testing rate. RDS assumes that with enough waves all chains from different seeds will mix in the same population; however this is not the case with this sample. This makes the estimator unstable, making the convergence more difficult and confidence intervals too small. In these situations when it is no longer possible to continue recruitment, it is recommended to present results for different branches, instead of a single estimate.

**Figure 14: Bottleneck plots, MSM Colombo**



The challenge with bottlenecks is further explored in Table 90, in an effort to better illustrate the issue. If there were an overlap between 95% CIs, presentation of a single estimate would be justified. In the past, RDS analysis tools did not have the capacity to analyze data to this depth, and typically by using the Gile’s SS estimator these issues are avoided. However, as is the case with MSM in Colombo, CIs are not overlapping, and therefore we present key indicators disaggregated by the two divergent seeds.

**Table 90: Bottleneck plots, seed subset analysis, MSM Colombo**

GARPR Indicators	Whole sample N=504		Subset (seed=1) N=169		Subset (seed=4) N=183	
	%	95% CI	%	95% CI	%	95%CI
<b>Knowledge</b>	29.7	25.0 – 33.9	41.3	32.9 – 49.3	12.5	9.9 – 20.1
<b>HIV test</b>	19.7	14.4 – 24.4	31.3	20.6 – 41.3	6.9	3.5 – 9.8
<b>Prevention programmes</b>	21.1	15.8 - 26.0	29.2	19.7 - 38.2	6.8	3.3 - 10.0
<b>Condom use at last anal sex</b>	64.3	58.5 – 69.7	71.0	61.6 – 80.1	47.1	38.7 – 55.5

In order to further address this issue, homophily was evaluated (tendency to recruit those similar to oneself). Homophily overall is near one, indicating there is no homophily (i.e., no tendency to recruit those similar); however for two indicators (highlighted in bold) the homophily estimate is slightly higher, although this is not of much concern given that the Gile's SS estimator makes adjustments for homophily in calculating population estimates.

**Table 91: Homophily, MSM Colombo**

Indicator	Recruitment homophily	Estimated population homophily
Knowledge	1.03	1.05
HIV test	1.20*	1.54
Prevention programmes	1.18*	1.43
Condom use at last anal sex	1.08	1.09

\*p < 0.05

### 9.1.4 Homophily

As mentioned earlier, a homophily value of 1 means there is no homophily. The values above 1 show presence of positive homophily (people are recruiting similar to themselves), values below 1 mean negative homophily (people are recruiting different from themselves). The value can be interpreted similar to an odds ratio. Homophily amongst MSM in Colombo across all indicators ranges between 1.00 to 1.54, which is within reason given the large sample size (Table 92).

**Table 92: Homophily, MSM Colombo**

Indicator	Recruitment homophily	Estimated population homophily
HIV	1.00	1.00
Active syphilis	1.00	1.06
Condom use at last anal sex	1.08	1.09
Received free condoms from NGOs or a health care centre in the last 12 months and know where to obtain an HIV test	1.18*	1.43
Correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	1.03	1.05
Tested for HIV in the past 12 months and knows result	1.20*	1.54

\*p < 0.05

### 9.1.5 Study and recruiter information

For MSM in Colombo the main reason for participating in the IBBS survey was for the HIV test (74.4%) (Table 93). Almost all MSM received their coupon from a friend or acquaintance (99.6%). Length of time respondents have known their recruiter is predominantly over one year (80.0%), further confirming strong network ties and validity of proper recruitment for RDS. The screener was confident that the entire sample of MSM respondents were genuine MSM, and not individuals turning up solely for the incentives. One additional question asked in this section was which MSM subpopulation respondents self identified with – Nachchi, male sex worker, or 'other MSM' (neither of the above two categories). It is likely that the understanding of this question was unclear, as nearly three quarters (67.4%) indicated male sex worker, and a quarter (28.0%) responded nachchi, while only 6.2% responded other (data not shown in table). This data does not correspond

with the paying sex section to come, and therefore this data is not recommended for use. Another explanation can be the blurred categories that MSM are in. This can be seen from the qualitative interview data. MSM can fit in various “boxes” and therefore it would be a hard question to answer.

### MSM Colombo

A MSM/Nachchi of 38 years of age explained this as follows: “I have not a regular partner but am seeing multiple other men. There is a thin line between having more sexual partners and being a sex worker; the step is easily made. There are sex workers with customers for the money, they have ten partners a night but this is not for pleasure. Sometimes they are even asked to have sex without a condom for more money like 2000 rupees. One can have sexual relations for several reasons: transactional sexual relations for money or for security and protection and then there is sex for pleasure only. I live with my mom. There are other people coming from the villages to Colombo and end up living in their boarding homes and there if they are picked up by partners they can also become victim of rape. So it is better to live with a husband of convenience or for protection so they cannot be forced inside their homes. A partner gives protection and contextualization and diminishes the occurrence of rape and force”.

**Table 93: Study and recruiter information, MSM Colombo**

Characteristic	Sample proportions	
	n/N	%
<b>Main reason for participation in the study</b>		
Interest in HIV and sexual health	55/504	10.9
HIV test	375/504	74.4
Interest in issues related to MSM	58/504	11.5
Helping the community	1/504	0.2
Friend wanted me to participate	14/504	2.8
Someone forced me	0/504	-
Incentive/Gift	1/504	0.2
<b>Mode of receiving the coupon</b>		
From a friend/acquaintance	496/498 <sup>51</sup>	99.6
Found it	2/498	0.4
Bought it/Exchanged it for something	0/498	-
<b>Length of time they knew the person who gave them the coupon</b>		
< 6 months	23/496	4.6
6 months – 1 year	76/496	15.3
> 1 year	397/496	80.0
<b>Screener’s confidence that participant is MSM</b>		
Confident	501/504	99.4
Somewhat confident	3/504	0.6
Not confident	0/504	-

### 9.1.6 Biological test results

The HIV prevalence for MSM in Colombo is 1.2%, prevalence of active syphilis is 2.4%, and lifetime prevalence of syphilis (active and non-active) is 5.6% (Table 94).

<sup>51</sup> Seeds not included as these coupons were purposefully distributed by the IBBS survey team.

**Table 94: HIV and syphilis prevalence, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
HIV	6/504	1.2	1.2	0.2 – 2.2
Syphilis – Active	9/504	1.8	2.4	0.3 – 4.6
Syphilis – Non-Active	19/504	3.8	3.2	1.7 – 4.7
Syphilis – Total (active and non-active)	28/504	5.6	5.6	3.0 – 8.2

### 9.1.7 Socio-demographic characteristics

The average age of MSM in Colombo is 33.8 years, and only 8.6% are between the age of 18 and 20 (Table 95). Two respondents identified as 'other' sex, and 11 respondents indicated they had another sex at birth. The entire population (100.0%) is Sri Lankan by birth and nationality and Sinhalese is the predominant ethnic group (84.9%) followed by Sri Lankan Tamil (9.4%). The 12 'other' responses included Muslim, and Sri Lankan Muslim (2.4%). While all respondents (100.0%) have lived in Colombo for at least one year, four respondents also mentioned other districts as their residence in the past year, namely Kandy, Kalutara, Gampaha, and Matara, and 12 respondents indicated other districts than Colombo as their primary residences Anuradhapura (n=7), Galle (n=5), Kandy (n=5), and Jaffna (n=4). Similar to the ethnic breakdown, most MSM in Colombo speak Sinhalese at home (91.7%), followed by Tamil (8.6%). Nearly all MSM in Colombo are literate (90.9%), with only a few having never attended school (2.9%). A handful of MSM are currently enrolled as students (6.1%). Most MSM (81.9%) had a monthly personal income between 10,000 and 40,000 rupees per month and are supporting between 1 and 13 other persons (93.7%). Factory worker (24.1%) and street vendor/casual labourer (23.4%) are the most common occupations, followed by hairdresser/beautician/masseuse (10.4%) and farmer / agricultural worker (9.9%).

**Table 95: Socio-demographic characteristics, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Age</b>				
Mean	34.3	-	33.8	-
SD	11.9	-	12.2	-
Median	33.0	-	32.0	-
Range	18 – 71	-	-	-
<b>Age groups</b>				
Aged under 20	38/504	7.5	8.6	5.3 – 12.1
Aged under 25	145/504	28.8	31.5	26.4 – 36.9
18 – 24	145/504	28.8	31.5	26.4 – 36.9
25 – 34	136/504	27.0	25.6	21.1 – 29.9
35 – 44	121/504	24.0	22.6	18.5 – 26.7
≥ 45	102/504	20.2	20.3	15.9 – 24.7
<b>Sex</b>				
Male	502/504	99.6	98.9	97.1 – 100.0
Other	2/504	0.4	1.1	0.0 – 2.9
<b>Sex same as at birth</b>				
Yes	491/502	97.8	97.4	95.2 – 99.5
No	11/502	2.2	2.6	0.5 – 4.8



Table 95: Socio-demographic characteristics, MSM Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Citizenship</b>				
Sri Lankan	504/504	100	100	-
<b>Country of birth</b>				
Sri Lanka	504/504	100	100	-
<b>Ethnicity</b>				
Sinhalese	435/504	86.3	84.9	80.3 – 89.4
Sri Lankan Tamil	42/504	8.3	9.4	5.6 – 13.4
Indian Tamil	2/504	0.4	0.5	0.0 – 1.0
Moor	5/504	1.0	0.9	0.1 – 1.6
Burgher	2/504	0.4	0.3	0.0 – 0.6
Malay	6/504	1.2	1.3	0.0 – 2.5
Other	12/504	2.4	2.7	1.1 – 4.4
<b>District of residence during the past one year</b>				
Colombo	500/504	99.2	99.5	99.0 – 100.0
Other	4/504	0.8	0.5	0.0 – 1.0
<b>Length of time lived in Colombo</b>				
< 1 year	0/504	-	-	-
≥ 1 year	504/504	100	100	-
<b>Primary residence</b>				
Colombo	436/504	86.5	86.8	83.2 – 90.5
Other	68/504	13.5	13.2	9.5 – 16.8
<b>Language spoken at home</b>				
Sinhalese	466/504	92.5	91.7	88.5 – 94.7
Tamil	40/504	7.9	8.6	5.5 – 11.7
English	6/504	1.2	0.9	0.2 – 1.7
Other <sup>52</sup>	3/504	0.6	0.7	0.0 – 1.4
<b>Literate</b>				
Yes	459/503	91.3	90.9	88.1 – 93.6
<b>Highest level of education</b>				
Never attended school	16/504	3.2	2.9	1.5 – 4.2
Grade 1-5	46/504	9.1	9.9	7.1 – 12.8
Grade 6-10	231/504	45.8	43.9	38.6 – 49.0
Passed O/L	139/504	27.6	29.1	24.3 – 34.0
Passed A/L	64/504	12.7	12.9	9.2 – 16.6
Completed Diploma	4/504	0.8	0.6	0.0 – 1.2
Completed Degree	4/504	0.8	0.7	0.1 – 1.3
<b>Currently a student</b>				
Yes	31/504	6.2	6.1	3.5 – 8.8
<b>Type of institution enrolled in</b> (among current students)				
University	9/29	31.0	30.2	15.3 – 44.8
Technical College	6/29	20.7	21.4	6.4 – 36.4
Vocational School	12/29	41.4	38.8	18.9 – 58.3
Other <sup>53</sup>	2/29	6.9	9.9	0.0 – 24.9

<sup>52</sup> Other: Muslim (n=2), this question was misinterpreted for these respondents, as 'Muslim' is not a language

<sup>53</sup> Other: Advance level Colombo (n=1), business management in Esoft (n=1)

Table 95: Socio-demographic characteristics, MSM Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Monthly personal income</b>				
< 5,000 Rupees	36/489	7.4	7.3	4.7 – 9.8
5,000-10,000	27/489	5.5	5.4	2.7 – 8.1
10,001-20,000	125/489	25.6	24.8	20.2 – 29.1
20,001-30,000	167/489	34.2	34.2	29.3 – 39.2
30,001-40,000	109/489	22.3	22.9	18.3 – 27.5
> 40,000	20/489	4.1	3.8	2.1 – 0.6
Don't know	5/489	1.0	1.7	0.0 – 3.6
<b>Number of people that financially depend on the participant</b>				
0	28/479	5.6	6.3	3.2 – 9.5
1	176/479	35.4	33.8	28.8 – 38.8
2	82/479	16.5	17.1	13.1 – 21.2
3	100/479	20.1	20.0	15.9 – 24.1
4	44/479	8.9	8.1	5.6 – 10.4
5 and more	67/479	13.5	14.6	10.3 – 19.0
<b>Occupation</b>				
Street vendor/casual labourer	117/474	24.7	23.4	18.8 – 27.7
Factory worker	102//474	21.5	24.1	19.5 – 29.2
Professional/banker/accountant	14/474	3.0	2.3	1.1 – 3.4
Teacher	4/474	0.8	1.1	0.0 – 2.3
Business owner	12/474	2.5	2.0	0.8 – 3.1
Hairdresser/beautician/masseuse	57/474	12.0	10.4	7.2 – 13.3
Waitress/bartender/hotel employee	47/474	9.1	9.9	6.5 – 13.2
5/474	5/474	1.1	1.7	0.0 – 3.9
Musician/dancer/performer	3/474	0.6	0.4	0.0 – 0.9
Tourism/travel agent/tour guide	5/474	1.1	0.8	0.1 – 1.6
Government worker	6/474	1.3	1.5	0.2 – 2.8
Security guard	7/474	1.5	1.4	0.5 – 2.3
Fisherman/seafarer Farmer/agriculture worker	3/474	0.6	1.4	0.0 – 3.5
Taxi driver/Three wheeler driver	41/474	8.6	9.7	6.4 – 13.3
Student	10/474	2.1	2.0	0.4 – 3.6
NGO	9/474	1.9	1.1	0.3 – 1.8
Unemployed	14/474	3.0	3.5	1.1 – 6.1
Other <sup>54</sup>	18/474	3.8	3.1	1.5 – 4.6

The majority of MSM in Colombo are single, and have never been married (70.7%) and live with their parents (39.9%) (Table 96). Less than a quarter have children (22.4%), ranging from 1 to 6 children.

<sup>54</sup> Other: Diving (n=3), Mason (n=3), Attendant (n=1), Ayurvedic doctor (n=1), Coconut plucker (n=1), Fishing (n=1), Office clerk (n=1), Pharmacists (n=1), Plumber (n=1), Presenter (n=1), Seamen (n=1), Welder (n=1), Salesmen (n=1), Field supervisor (n=1).

**Table 96: Marital status, living arrangements and children, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Marital status</b>				
Single (never married)	350/504	69.4	70.7	66.4 – 75.0
Living together but not married	2/504	0.4	2.3	0.0 – 0.5
Married	134/504	26.6	25.7	21.4 – 29.9
Divorced/Separated	17/504	3.4	2.9	1.3 – 4.5
Widowed	1/504	0.2	0.5	0.0 – 1.2
<b>Mode of living</b> (multiple answers possible)				
Alone	110/503	21.9	20.4	16.0 – 24.5
With husband/wife	109/503	21.7	21.3	17.3 – 25.3
With other sexual partner	49/503	9.7	9.4	6.1 – 12.6
With parents	193/503	38.4	39.9	34.7 – 45.5
With siblings	57/503	11.3	11.7	7.9 – 15.4
With children	36/503	7.2	6.9	4.6 – 9.2
With other family/relatives	1/503	0.2	0.2	0.0 – 0.4
With friend/roommate (not sexual partner)	6/503	1.2	0.9	0.1 – 1.7
With co-workers	1/503	0.2	0.2	0.0 – 0.4
<b>Type of residence</b>				
Temporary shelter	38/503	7.6	8.0	4.8 – 11.2
Boarding house	87/503	17.3	15.5	11.9 – 18.9
Parents' home	173/503	34.4	34.8	29.6 – 40.1
My home	197/503	39.2	39.3	33.7 – 45.0
Lodging	2/503	0.4	1.0	0.0 – 2.8
On the street	1/503	0.2	0.5	0.0 – 1.2
Brothel	2/503	0.4	0.3	0.0 – 7.9
Other <sup>55</sup>	3/503	0.6	0.5	0.0 – 0.9
<b>Has children</b>				
Yes	114/504	22.6	22.4	18.0 – 26.7
<b>Number of children</b>				
1	43/114	37.7	42.8	33.2 – 53.2
2	40/114	35.1	31.7	22.8 – 40.0
3	24/114	21.1	19.5	12.0 – 26.8
4	5/114	4.4	5.4	-
5 or more	2/114	1.8	0.6	-

### 9.1.8 General sexual history

More than half of MSM (59.7%) have ever had sex with a woman, but nearly all (96.7%) have ever had anal sex with a man (Table 97). The average age of first anal sex with a man is 18.5 years, with a range of 6 to 51 years. Noticeably, a quarter (22.0%) of all MSM in Colombo had anal sex with a man for the first time when they were below the age of 16. Nearly half (49.4%) of MSM in Colombo had two or more sexual partners in the last seven days, and over a third of MSM (35.6%) reported two or more casual partners (compared with regular partners). A quarter (21.6%) of MSM in Colombo had anal sex every time they had sex with a partner in the last six months, with only 3.4% reporting they never had anal sex with partners in the last six months. More than a third (35.7%) of MSM in Colombo did not use a condom at last anal sex with a partner (GAPR indicator). Of the six MSM who are HIV positive, all six used a condom at last anal sex (data not shown).

<sup>55</sup> Other: At a temple (n=1), relative's place (n=1)

**Table 97: General sexual history, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever had sex with a woman</b> (vaginal or anal) Yes	297/504	58.9	59.7	54.2 – 65.4
<b>Ever had anal sex with a man</b> Yes	487/504	96.6	96.7	95.2 – 98.2
<b>Age at first anal sex with a man</b> Mean	18.4	-	18.5	-
SD	5.3	-	5.1	-
Median	18.0	-	18.0	-
Range	6 – 51	-	-	-
<b>Age groups at first anal sex with a man</b> < 16	123/483	25.5	22.0	18.3 – 25.1
16 – 18	176/483	36.4	39.1	34.1 – 44.5
19 – 24	129/483	26.7	28.1	23.3 – 33.0
≥ 25	55/483	11.4	10.8	7.7 – 13.8
<b>Age of partner at first anal sex with a man</b> Mean	22.6	-	22.8	-
SD	6.5	-	6.6	-
Median	22.0	-	22.0	-
Range	2 – 50	-	-	-
<b>Age groups of partner at first anal sex with a man</b> < 16	37/453	8.2	7.7	4.5 – 10.8
16 – 18	78/453	17.2	16.6	12.3 – 20.8
19 – 24	172/453	38.0	38.8	33.4 – 44.4
≥ 25	166/453	36.6	36.9	31.8 – 42.0
<b>Number of <u>all</u> sexual partners in the last 7 days</b> Mean	2.2	-	2.5	-
SD	3.5	-	3.5	-
Median	2.0	-	1.0	-
Range	0-45	-	-	-
0	101/504	20.0	21.5	16.8 – 26.4
1	145/504	28.8	29.2	24.6 – 33.8
2	145/504	28.8	28.9	24.4 – 33.3
3 or more	113/504	22.4	20.5	15.8 – 24.9
<b>Number of <u>casual</u> sexual partners in the last 7 days</b> (among those who reported at least one sex partner) Mean	1.7	-	1.7	-
SD	3.0	-	3.0	-
Median	1.0	-	1.0	-
Range	0-25	-	-	-
0	164/403	40.7	39.3	34.0 – 44.4
1	97/403	24.1	25.0	20.1 – 30.2
2	68/403	16.9	18.7	14.0 – 23.7
3 or more	74/403	18.4	16.9	12.2 – 21.5

Table 97: General sexual history, MSM Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of <u>regular</u> sexual partners in the last 7 days</b> (among those who reported at least one sex partner)				
Mean	1.1	-	1.1	-
SD	1.9	-	2.1	-
Median	1.0	-	1.0	-
Range	0-25	-	-	-
0	142/403	35.2	36.5	31.2 – 42.0
1	176/403	43.7	43.6	37.8 – 49.4
2	58/403	14.4	13.4	10.0 – 16.6
3 or more	27/403	6.7	6.5	3.3 – 9.6
<b>Number of <u>all</u> sexual partners in the last 6 months</b>				
Mean	10.8	-	10.1	-
SD	21.4	-	18.0	-
Median	6.0	-	5.0	-
Range	1-300	-	-	-
0	0/504	-	-	-
1	64/504	12.7	13.1	9.5 – 16.7
2	82/504	16.3	19.5	15.0 – 24.5
3 – 5	99/504	19.6	20.3	16.2 – 24.6
6 or more	259/504	51.4	47.1	41.3 – 52.3
<b>Number of <u>casual</u> sexual partners in the last 6 months</b>				
Mean	7.4	-	6.7	-
SD	18.3	-	14.2	-
Median	2.0	-	2.0	-
Range	0-250	-	-	-
0	149/504	29.6	30.1	25.5 – 34.8
1	46/504	9.1	9.4	6.5 – 12.3
2	62/504	12.3	13.6	10.1 – 17.3
3 – 5	78/504	15.5	15.4	11.8 – 18.9
6 or more	169/504	33.5	31.5	26.6 – 36.2
<b>Number of <u>regular</u> sexual partners in the last 6 months</b>				
Mean	3.4	-	3.4	-
SD	7.7	-	8.5	-
Median	1.0	-	1.0	-
Range	0-100	-	-	-
0	156/504	31.0	30.2	25.3 – 34.9
1	125/504	24.8	25.2	20.5 – 29.8
2	76/504	15.1	18.0	13.9 – 22.5
3 – 5	64/504	12.7	12.4	9.2 – 15.5
6 or more	83/504	16.5	14.3	10.7 – 17.5

Table 97: General sexual history, MSM Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Had anal sex with partners in the last 6 months</b>				
Every time	123/484	25.4	21.6	17.3 – 25.4
Almost every time	149/484	30.8	32.0	27.1 – 37.1
Sometimes	188/484	38.8	43.0	37.9 – 48.7
Never	24/484	5.0	3.4	2.0 – 4.6
<b>Used a condom at last anal sex<sup>56</sup></b>				
Yes	326/487	66.9	64.3	58.6 – 69.6
No	161/487	33.1	35.7	30.4 – 41.4

### 9.1.9 Experience with sex work

Over a third of MSM in Colombo have ever received money, goods or services in exchange for sex, with over three quarters (77.7%) of these respondents indicating this has occurred in the last 12 months (Table 98). Just over two-thirds (68.2%) indicated they used a condom the last time they provided transactional sex. The majority of this paid sex work was with a male partner (96.8%). A fewer percentage (22.5%) of MSM in Colombo have ever paid for sex work (e.g. been to a sex worker), but in this case a larger percentage sought sex from a female (16.0%) and used a condom (82.6%).

Table 98: Experience with sex work, MSM Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever received money, goods or services in exchange for sex</b>				
Yes	178/502	35.5	35.9	30.6 – 41.1
<b>Received money, goods or services in exchange for sex in last 12 months</b>				
Yes (among those who ever sold sex)	138/178	77.5	77.7	70.3 – 85.2
Yes (among all)	138/504	27.4	27.8	23.0 – 32.7
<b>Sex of partner last time they received money, goods or services in exchange for sex</b>				
Female	7/178	3.9	3.1	0.6 – 5.5
Male	171/178	96.1	96.8	94.5 – 99.4
<b>Used a condom last time they received money, goods or services in exchange for sex</b>				
Yes	125/177	70.6	68.2	59.3 – 76.7
Don't know	1/177	0.6	0.5	0.0 – 1.5
<b>Ever given money, goods or services in exchange for sex</b>				
Yes	122/504	24.2	22.5	18.1 – 26.6

<sup>56</sup> GARPR indicator

Table 98: Experience with sex work, MSM Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Given money, goods or services in exchange for sex in last 12 months</b>				
Yes (among those who ever paid for sex)	99/122	81.1	83.4	77.1 – 90.0
Yes (among all)	99/504	19.6	18.8	14.5 – 22.8
<b>Sex of partner last time they gave money, goods or services in exchange for sex</b>				
Female	18/122	14.8	16.0	8.9 – 23.2
Male	104/122	85.2	84.0	76.8 – 91.1
<b>Used a condom last time they gave money, goods or services in exchange for sex</b>				
Yes	98/122	80.3	82.6	75.7 – 90.1
Don't know	1/122	0.8	0.5	0.0 – 1.2

### 9.1.10 Sexual behaviour with casual male partners

Among those who had a casual partner in the last six months, only a third (31.7%) used a condom every time they had sex with these casual male partners (Table 99). Just over two-thirds (64.6%) used a condom at last sex with a casual partner, similar to the GARPR indicator presented above, which showed condom usage at last sex (with any male partner) at 64.3%. Predominantly, the MSM themselves suggested condom use (94.2%), and the most common reasons for using condoms were to prevent HIV and STIs (74.5%) and because they did not trust their partner (55.9%). Primary reasons for not using condoms included not thinking it was necessary (41.2%), condoms not available (23.9%) and didn't think of it (22.2%). MSM in Colombo are typically meeting their partners at streets, parks, or through public transport (48.0%) and through friends (28.4%). Nobody indicated that they believe their last casual partner's HIV status to be positive, but nearly a third (38.7%) were not sure (e.g. did not know).

Table 99: Sexual behaviour with casual male partners, MSM Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Condom use during last 6 months</b>				
Every time	124/351	35.3	31.7	24.2 – 38.7
Almost every time	76/351	21.7	24.4	18.8 – 30.5
Sometimes	109/351	31.1	32.5	25.2 – 39.9
Never	33/351	9.4	8.3	5.3 – 11.1
Don't know	9/351	2.6	3.1	0.2 – 6.1
<b>Used a condom at last anal sex</b>				
Yes	273/400	68.3	64.6	57.6 – 71.0
<b>Person who suggested to use a condom</b>				
MSM did	257/273	94.1	94.2	91.2 – 97.9
Partner did	16/273	5.9	5.8	2.7 – 8.9

Table 99: Sexual behaviour with casual male partners, MSM Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for using a condom</b> (multiple answers possible)				
To prevent HIV/STIs	195/272	71.7	74.5	69.0 – 80.4
Do not trust partner	161/272	59.2	55.9	48.2 – 63.0
Messages advising use of condoms	23/272	8.5	7.6	4.6 – 10.6
To prevent pregnancy	1/272	0.4	0.6	0.0 – 1.8
Other	1/272	0.4	0.2	0.0 – 0.6
<b>Reasons for <u>not</u> using a condom</b> (multiple answers possible)				
Never heard of condoms	3/126	2.4	1.5	0.0 – 3.2
Don't know how to obtain condoms	7/126	5.6	4.1	1.5 – 6.7
Didn't think it was necessary	51/126	40.5	41.2	30.6 – 51.9
Didn't think of it	25/126	19.8	22.2	12.2 – 32.5
Not available	29/126	23.0	23.9	14.3 – 33.7
Too expensive	2/126	1.6	0.6	0.0 – 1.4
Partner objected	19/126	15.1	9.9	4.4 – 14.6
Don't like them	13/126	10.3	9.5	2.1 – 16.7
Used other contraceptive	0/126	-	-	-
Used other prevention method	4/126	3.2	2.3	0.0 – 4.8
Regular partner	3/126	2.4	1.3	0.0 – 2.8
Condoms take away pleasure	11/126	8.7	5.6	1.8 – 8.9
<b>Places where last casual partner was met<sup>57</sup></b> (multiple answers possible)				
Brothel	1/490	0.2	0.3	0.0 – 0.6
Bar/café/disco/restaurant/nightclub	12//490	2.4	2.5	1.0 – 4.0
Hotel	15/490	3.1	3.3	1.0 – 5.7
Street, park, or public transport	233/490	47.6	48.0	42.6 – 53.5
Through friends	147/490	30.0	28.4	23.9 – 32.8
Internet, chat, or SMS	5/490	1.0	0.7	0.2 – 1.3
Motel or guest house	21/490	4.3	4.9	2.5 – 7.5
School	4/490	0.8	1.1	0.0 – 2.2
Party	13/490	2.7	2.6	1.1 – 4.1
Intermediary	0/490	-	-	-
Service station	9/490	1.8	2.0	0.7 – 3.2
Truck stop / three wheeler stop	1/490	0.2	0.5	0.0 – 1.3
Massage parlour/Spa	0/490	-	-	-
Other <sup>58</sup>	5/490	1.0	1.8	0.0 – 3.9
<b>Last casual sexual partner's HIV status</b>				
Negative	267/410	65.1	61.3	54.9 – 67.3
Positive	0/410	-	-	-
Don't know	143/410	34.9	38.7	32.8 – 45.1

### 9.1.11 Sexual behaviour with regular male partners

Among MSM in Colombo who had a regular partner in the last six months, less than half (42.3%) used a condom during sex every time during the last six months (Table 100). The patterns found with casual partners are present with regular male partners as well. For example, the reasons for

<sup>57</sup> Missing from the denominator include decline to answer, don't know and those who have never had a casual partner.

<sup>58</sup> Other: At home, (n=2) in prison (n=2) and at hospital (n=1)



not using a condom are the same– didn't think it was necessary (38.0%), not available (25.0%), and didn't think of it (18.9%). Similarly, reasons for using condoms included, to prevent HIV and STIs (70.5%) and not trusting the partner (54.5%), and most regular partners were also met through friends (39.5%) and in streets, parks, or through public transport (36.3%).

**Table 100: Sexual behaviour with regular male partners, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Condom use during last 6 months<sup>59</sup></b>				
Every time	148/346	42.8	42.3	3.6 – 48.8
Almost every time	73/346	21.1	20.9	15.8 – 26.0
Sometimes	73/346	21.1	22.6	17.1 – 28.3
Never	46/346	13.3	11.6	7.4 – 15.6
Don't know	6/346	1.7	2.6	0.0 – 5.4
Used a condom at last anal sex				
Yes	288/442	65.2	62.6	56.5 – 68.3
<b>Person who suggested to use a condom</b>				
MSM did	272/288	94.4	93.8	90.7 – 96.7
Partner did	16/288	5.6	6.2	3.3 – 9.3
<b>Reasons for using a condom</b> (multiple answers possible)				
To prevent HIV/STIs	202/288	70.1	70.5	63.8 – 77.2
Do not trust partner	159/288	55.2	54.5	47.1 – 61.9
Messages advising use of condoms	32/288	11.1	11.6	7.3 – 16.1
To prevent pregnancy	0/288	-	-	-
<b>Reasons for <u>not</u> using a condom</b> (multiple answers possible)				
Never heard of condoms	8/153	5.2	3.8	0.7 – 6.7
Don't know how to obtain condoms	9/153	5.9	5.2	1.1 – 9.4
Didn't think it was necessary	58/153	37.9	38.0	28.8 – 47.2
Didn't think of it	29/153	19.0	18.9	11.7 – 26.1
Not available	33/153	21.6	25.0	15.9 – 34.4
Too expensive	1/153	0.7	0.3	0.0 – 0.8
Partner objected	19/153	12.4	10.7	5.9 – 15.4
Don't like them	13/153	8.5	8.6	2.1 – 15.1
Used other contraceptive	0/153	-	-	-
Used other prevention method	2/153	1.3	1.6	0.0 – 3.7
Partner was faithful	18/153	11.8	10.9	3.5 – 18.3
Condoms take away pleasure	10/153	6.5	4.9	1.6 – 7.9

<sup>59</sup> Among those who had a casual partner in the last six months (149/504)

Table 100: Sexual behaviour with regular male partners, MSM Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Places where last regular partner was met</b> (multiple answers possible)				
Brothel	1/498	0.2	0.2	0.0 – 0.5
Bar/café/disco/restaurant/ nightclub	11/498	2.2	1.6	0.7 – 2.5
Hotel	15/498	3.0	2.6	1.2 – 4.1
Street, park, or public transport	190/498	38.2	36.3	31.2 – 41.2
Through friends	198/498	39.8	39.5	34.3 – 44.6
Internet, chat, or SMS	6/498	1.2	1.2	0.2 – 2.2
Motel or guest house	37/498	7.4	9.6	6.1 – 13.5
School	3/498	0.6	0.4	0.0 – 0.8
Party	11/498	2.2	2.0	0.8 – 3.2
Intermediary	0/498	-	-	-
Service station	13/498	2.6	2.2	1.1 – 3.3
Truck stop / three wheeler stop	1/498	0.2	0.3	0.0 – 0.6
Massage parlour/Spa	0/498	-	-	-
Other: Home	6/498	1.2	1.9	0.0 – 3.8
Other <sup>60</sup>	11/498	2.2	2.3	0.8 – 3.8
<b>Last regular sexual partner's HIV status</b>				
Negative	323/449	71.9	69.7	63.8 – 75.1
Positive	0/449	-	-	-
Don't know	126/449	28.1	30.4	24.9 – 36.2

### 9.1.12 Sexual behaviour with women

Among MSM who ever had sex with a women, nearly three quarters have had sex with a woman in the last 12 months. Less than half (46.2%) of MSM in Colombo used a condom at last sex with a woman, which is lower than at last sex with a male partner. Similar to patterns of sex with male partners, the MSM were the ones to typically suggest condom use (93.9%), and the reasons for using condoms include to prevent HIV and STIs (66.6%), not trusting the partner (69.9%); reasons for not using condoms include not thinking it was necessary (42.9%), condoms not being available (25.7%), and not thinking of it (20.1%); and finally, MSM in Colombo also met their female partners through friends (45.4%) and on the street, park, or on public transport (31.7%).

Three MSM respondents also mentioned that those MSM who are married would have a hard time using condoms with their wives. If they would do so, their wives would complain that they would be having an affair with someone else.

<sup>60</sup> Other: Neighbor (n=6), prison (n=2), foreigner (n=1), my wife (n=1), relative (n=1)

**Table 101: Sexual behaviour with women, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Had sex with a female partner in the last 12 months?</b> <sup>61</sup>				
Yes	216/296	73.0	71.3	64.3
<b>Condom use during last 6 months</b>				
Every time	77/184	41.8	39.3	30.2 – 48.1
Almost every time	31/184	16.8	16.0	9.9 – 22.0
Sometimes	39/184	21.2	20.1	13.4 – 26.7
Never	23/184	12.5	17.6	9.5 – 26.7
Don't know	14/184	7.6	6.8	0.7 – 12.9
<b>Used a condom at last sex with a female partner</b>				
Yes	144/281	51.2	46.2	38.8 – 52.9
<b>Person who suggested to use a condom</b>				
MSM did	135/144	94.4	93.9	89.4 – 98.3
Woman did	8/144	5.6	6.1	1.7 – 10.6
<b>Reasons for using a condom</b> (multiple answers possible)				
To prevent HIV/STIs	89/143	62.2	66.6	58.8 – 75.0
Do not trust partner	89/143	62.2	59.9	50.3 – 69.2
Messages advising use of condoms	8/143	5.6	6.6	2.0 – 11.4
To prevent pregnancy	4/143	2.8	3.7	0.3 – 7.3
<b>Reasons for not using a condom</b> (multiple answers possible)				
Never heard of condoms	2/133	1.5	0.8	0.0 – 1.8
Don't know how to obtain condoms	5/133	3.8	3.7	0.3 – 7.0
Didn't think it was necessary	58/133	43.6	42.9	32.5 – 53.2
Didn't think of it	23/133	17.3	20.1	10.7 – 29.8
Not available	28/133	21.1	25.7	16.7 – 35.2
Too expensive	2/133	1.5	0.6	0.0 – 1.4
Partner objected	6/133	4.5	5.2	1.2 – 9.4
Don't like them	11/133	8.3	8.6	1.7 – 15.6
Used other contraceptive	1/133	0.8	0.8	0.0 – 2.5
Used other prevention method	0/133	-	-	-
Partner was a faithful client	17/133	12.8	11.7	5.6 – 17.7
Condoms take away pleasure	15/133	11.3	11.0	3.6 – 18.3

<sup>61</sup> Among those who have had sex with a woman

Table 101: Sexual behaviour with women, MSM Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Places where female partner were usually met</b> (multiple answers possible)				
Brothel	13/278	4.7	5.7	2.6 – 8.8
Bar/café/disco/restaurant/nightclub	5/278	1.8	1.4	0.2 – 2.6
Hotel	22/278	7.9	6.6	3.7 – 9.3
Street, park, or public transport	94/278	33.8	31.7	25.0 – 38.1
Through friends	121/278	43.5	45.4	38.8 – 52.3
Internet, chat, or SMS	0/278	-	8.4	3.6 – 13.6
Motel or guest house	17/278	6.1	-	-
School	2/278	0.7	0.2	0.0 – 0.5
Party	2/278	0.7	0.7	0.0 – 1.4
Intermediary	0/278	0	0	-
Service station	4/278	1.4	1.1	0.0 – 2.2
Truck stop / three wheeler stop	0/278	-	-	-
Massage parlour/Spa	0/278	-	-	-
Other <sup>62</sup>	9/278	3.2	2.7	0.5 – 4.8
<b>Last female sexual partner's HIV status</b>				
Negative	184/290	63.4	61.9	54.4 – 69.1
Positive	0/290	-	-	-
Don't know	106/290	36.6	38.2	30.9 – 45.6

### 9.1.13 Male condoms access and use

Nearly all MSM in Colombo have heard of male condoms (98.4%), ever used a male condom (92.2%), and know where to obtain a male condom (99.1%) (Table 102). The most common places where they can obtain male condoms are private pharmacies and chemists (89.5%) and Government STD clinics (11.5%), with the same trend found for their main sources of condoms as well, at private pharmacies and chemists (90.0%) and Government STD clinics (11.1%). Just over a third (27.4%) of MSM in Colombo have been given a condom in the last 12 months by an NGO or health centre. Over three quarters of MSM in Colombo find condoms to be very affordable or somewhat affordable (89.4%) and very easy or somewhat easy to obtain (87.6%).

#### MSM Colombo

An issue mentioned in the qualitative interviews about condoms was that it is hard for male sex workers to always use condoms. MSM said "It is difficult to use condoms in public bathrooms and other hotspots such as railway stations, parks, play grounds and the beach. In the public bathrooms this is because the men in charge do not want them to put the used condoms in the toilets. In other places, the police may check the bags of male sex workers, and arrest those who walk around with a condom". They also mentioned that condom breakage happens regularly.

<sup>62</sup> Other: Wife (n=1), at home (n=3), women came finding him (n=1)

**Table 102: Male condom access and use, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of a male condom</b>				
Yes	494/504	98.0	98.4	97.4 – 99.4
<b>Ever used a male condom</b>				
Yes	457/494	92.5	92.2	89.2 – 95.1
<b>Knows where to obtain male condoms</b>				
Yes	489/494	99.0	99.1	98.3 – 99.9
<b>Places where they can obtain male condoms (multiple answers possible)</b>				
Government STD clinic	65/489	13.3	11.5	8.1 – 14.6
Government non-STD clinic	11/489	2.2	3.2	0.8 – 5.8
Private clinic	6/489	1.2	1.9	0.3 – 3.8
Private pharmacy or chemist	439/489	89.8	89.5	86.0 – 93.0
Traditional healer/Herbalist	0/489	-	-	-
Neighbourhood market/Stand	4/489	0.8	2.4	0.1 – 5.0
Friends	35/489	7.2	6.1	3.7 – 8.4
Sex partner/s	19/489	3.9	4.6	2.2 – 7.2
Bar	2/489	0.4	0.4	0.0 – 0.9
Service Station/s	16/489	3.3	2.6	1.1 – 4.0
Other	6/489	1.2	1.9	0.3 – 3.8
<b>Main source/s of condoms (multiple answers possible)</b>				
Government STD clinic	61/480	12.7	11.1	7.5 – 14.4
Government non-STD clinic	9/480	1.9	2.9	0.5 – 5.5
Private clinic	3/480	0.6	1.4	0.0 – 3.2
Private pharmacy or chemist	426/480	88.8	90.0	86.9 – 93.2
Traditional healer/Herbalist	0/480	0	0	-
Neighbourhood market/Stand	5/480	1.0	2.5	0.0 – 5.1
Friends	44/480	9.2	7.3	5.0 – 9.2
Sex partner/s	21/480	4.4	3.8	2.1 – 5.4
Bar	0/480	0	0	-
Service Station/s	16/480	3.3	2.7	1.4 – 4.0
<b>Usually carries condoms</b>				
Yes	197/494	39.9	36.7	31.1 – 41.7
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>				
Yes	157/494	31.8	27.4	22.0 – 32.2
<b>Condom is affordable</b>				
Very affordable	378/494	76.5	75.7	70.8 – 80.5
Somewhat affordable	68/494	13.8	13.7	9.8 – 17.5
Not affordable	25/494	5.1	4.4	2.4 – 6.3
Don't know	23/494	4.7	6.2	3.1 – 9.6
<b>Condom is easy to obtain</b>				
Very easy	375/494	75.9	74.0	68.9 – 78.9
Somewhat easy	67/494	13.6	13.6	9.9 – 17.2
Not easy	25/494	5.1	5.8	3.2 – 8.6
Don't know	27/494	5.5	6.5	3.5 – 9.7

### 9.1.14 Lubricant availability and use

Unsurprisingly, more MSM than FSW have heard of (40.7%) and used lubricant (70.7% sometimes, usually or always use lubricant during vaginal or anal sex) (Table 103). The most common type of lubricant used amongst MSM in Colombo is baby oil (30.4%), lotion (29.7%) and water based (22.6%). Over three quarters of MSM (79.2%) are interested in using lubricant in the future.

**Table 103: Lubricant availability and use, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of lubricant</b>				
Yes	214/504	41.2	40.7	34.3 – 46.7
<b>Lubricant use during vaginal or anal sex</b>				
Always	58/213	27.2	26.5	18.7 – 34.3
Usually	43/213	20.2	22.0	14.8 – 29.5
Sometimes	50/213	23.5	22.2	15.3 – 28.9
Rarely	11/213	5.2	3.4	1.4 – 5.3
Never	51/213	23.9	25.8	17.6 – 34.2
<b>Type of lubricant used</b>				
Glycerine	25/160	15.6	13.3	8.0 – 18.4
Saliva/Water	18/160	11.3	8.9	4.7 – 12.7
Vaseline	32/160	20.0	21.5	14.1 – 29.1
Baby Oil	45/160	28.1	30.4	21.8 – 39.6
Lotion	41/160	25.6	29.7	20.8 – 39.2
Other Oil	4/160	2.5	2.3	0.1 – 4.5
Water-Based	41/160	25.6	22.6	16.6 – 28.1
Silicon-based	8/160	5.0	4.5	1.3 – 7.6
Soap	2/160	1.3	1.1	0.0 – 2.6
What I get from peer educator	6/160	3.8	2.5	0.2 – 4.6
Don't know	3/160	1.9	4.0	0.0 – 10.8
<b>Interested in using lubricant in the future</b>				
Yes	167/214	78.0	79.2	7.3 – 86.0
No	41/160	19.2	19.2	12.6 – 25.7
Don't know	6/160	2.8	1.6	0.4 – 2.6

### 9.1.15 Knowledge of STI symptoms in women and men

More than three quarters (77.8%) of MSM in Colombo have heard of diseases that transmit sexually, but under a third (30.8%) know it is possible to have an STI without symptoms (Table 104). The most common place mentioned where someone in the community can access STI treatment is a Government STD clinic (42.4%).

**Table 104: Knowledge of STI symptoms in men and women, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of diseases that can be transmitted sexually</b>				
Yes	409/503	81.3	77.8	73.1 – 82.1
<b>Knows it is possible to have an STI without symptoms</b>				
Yes	166/504	32.9	30.8	25.6 – 35.6

Table 104: Knowledge of STI symptoms in men and women, MSM Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Mentioned as a sign/symptom of STIs in women</b>				
(multiple answers possible)				
Abdominal pain	12/409	2.9	3.6	0.9 – 6.3
Genital discharge	86/409	21.0	21.8	16.7 – 27.0
Foul smelling discharge	25/409	6.1	5.2	3.1 – 7.0
Burning Pain on urination	63/409	15.4	14.0	9.9 – 18.0
Genital ulcers or sores	36/409	8.8	9.0	5.4 – 12.6
Swelling in groin area	66/409	16.1	13.5	10.1 – 16.6
Itching	118/409	28.9	27.8	22.2 – 33.3
<b>Does not know any symptoms of STIs in women</b>				
Yes	223/409	54.5	54.4	48.2 – 60.8
<b>Mentioned as a sign/symptom of STIs in men</b>				
(multiple answers possible)				
Abdominal pain	12/408	2.9	1.9	0.7 – 2.9
Genital discharge	158/408	38.7	39.5	33.8 – 45.3
Foul smelling discharge	13/408	3.2	2.3	0.9 – 3.6
Burning pain on urination	86/408	21.1	21.0	15.9 – 25.9
Genital ulcers or sores	36/408	8.8	6.7	4.1 – 8.9
Swelling in groin area	90/408	22.1	20.5	15.5 – 25.4
Itching	180/408	44.1	44.5	38.4 – 50.7
Other <sup>63</sup>	5/408	1.2	0.6	0.0 – 1.0
<b>Does not know any symptoms of STIs in men</b>				
Yes	122/408	29.9	31.0	25.3 – 36.8
<b>Places where someone from the community who has an STI can get treatment</b>				
(multiple answers possible)				
Ayurvedic physician	1/504	0.2	0.1	0.0 – 0.3
Pharmacy	3/504	0.6	0.5	0.0 – 1.1
Private clinic	37/504	7.3	7.0	4.3 – 9.6
Government STD clinic	237/504	47.0	42.4	36.3 – 47.8
Government clinic or hospital (non-STD)	100/504	19.8	20.1	15.8 – 24.3
Don't know	160/504	31.7	36.2	30.8 – 42.1

### 9.1.16 Patterns of STI care seeking

Few MSM in Colombo have had discharge in the last 12 months (2.9%), and even less had a sore or ulcer (0.9%) but of those who did, all (100.0%) sought treatment (Table 105), predominately at Government STD clinics (69.8%), and the reason for choosing the provider they chose was affordability (52.9%), confidentiality (25.6%), and recommendation by a friend or acquaintance (25.9%). Over three quarters (84.2%) of MSM told their providers that they have sex with men, and all were satisfied with the treatment they received (74.8% very satisfied and 25.2% somewhat satisfied).

Two MSM involved in outreach work in Colombo said the MSM they know normally go to the government STD clinics in their surrounding areas. However, lately MSM are reluctant to go as they

<sup>63</sup> Other: Getting thinner/thin (n=3), pale complexion (n=1), difficult to pee (n=1)

are checked physically by the medical staff of health centres, for example they check their throats, anus etc. Trans gender people also have to go to the male section but they do not want to be checked by a male officer, and if they are forced to undress they do not like that. Lastly, it was mentioned that these government STD clinics do not counsel them, they are given the advice to give up their sexual relations and get married properly.

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“When we go to the STD clinic they look at you immediately and assume that we are all positive. We feel much more comfortable coming here (IBBS site). The atmosphere is totally different”. They also prefer to know their HIV test results quicker, as was the case at the IBBS site. In the STD clinic results take approximately one week, and people have to pay to see their report, while it should be free of charge.

**Table 105: Patterns of STI care seeking, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Doctor confirmed STI in the last 12 months</b>				
Yes	16/410	3.2	4.7	1.7 – 7.8
<b>STI symptoms (discharge) in the last 12 months</b>				
Yes	14/503	2.8	2.9	0.8 – 5.0
<b>Sought treatment for discharge</b>				
Yes	14/14	100	100	-
<b>STI symptoms (sore or ulcer) in the last 12 months</b>				
Yes	6/504	1.2	0.9	0.2 – 1.6
<b>Sought treatment for sore or ulcer</b>				
Yes	6/6	100	100	-
<b>Places where STI treatment (for discharge, sore, or ulcer) was sought</b>				
(multiple answers possible)				
Government STD clinic	11/17	64.7	69.8	46.6 – 92.3
Government non-STD clinic	2/17	11.8	10.0	0.0 – 22.7
Private clinic	0/17	-	-	-
Private pharmacy or chemist	3/17	17.6	15.9	0.0 – 33.9
Traditional healer/Herbalist	0/17	-	-	-
Medicine or herbs from home	0/17	-	-	-
Don't know	3/17	17.6	14.8	0.0 – 33.9



Table105: Patterns of STI care seeking, MSM Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for choosing this/these places</b> (multiple answers possible)				
Confidentiality	5/16	31.3	25.6	3.2 – 46.6
Affordability	7/16	43.8	52.9	22.2 – 84.5
Recommendation by friend or acquaintance	5/16	31.3	25.9	3.8 – 48.0
Quality and/or specialized care given at this place	2/16	12.5	8.4	0.0 – 20.0
Knows the caregivers	0/16	-	-	-
Known friendliness of the caregivers	0/16	-	-	-
Proximity/Location	1/16	6.3	5.3	0.0 – 14.8
Don't know	1/16	6.3	5.2	0.0 – 15.0
<b>Told health care provider that they have sex with men last time they received STI treatment or diagnosis</b>				
Yes	14/17	82.4	84.2	66.6 – 100.0
<b>Satisfaction with treatment from health care provider during last visit for STI treatment</b>				
Very satisfied	12/17	70.6	74.8	52.6 – 96.1
Somewhat satisfied	5/17	29.4	25.2	3.8 – 47.4
Not satisfied	0/17	-	-	-

### 9.1.17 HIV information and personal risk perception

Just under three quarters of MSM in Colombo have heard of HIV / AIDS, with the main source of information coming from health services (29.1%) and NGOs (23.0%) (Table 106). Just under a quarter (22.5%) of MSM in Colombo believe they are at no risk of contracting HIV, the primary reason being they always use condoms (54.5%) and trust their partner(s) (51.2%). Amongst those who believe they are at risk (45.4%-small risk, 6.3%-moderate risk, 19.5%-high risk), having many sexual partners (56.4%) is the primary reason, followed by partner having other partners (30.4%). Of the six HIV positive MSM in Colombo, all six perceived their HIV status to be positive (data not shown). Of the 103 MSM who perceived themselves to be at high risk, 76 used a condom at last sex (data not shown).

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A young bi-sexual man of 21 in Colombo said “I was concerned about AIDS, and worried that I could have it. I indulged in sexual activities with males”. He did that with and without condoms. Sometimes, he carries condoms, but sometimes he runs out, or is in a hurry. He was very interested in having his blood tested. He started engaging in MSM activities a year ago, but intends to get married in two months. He wanted to check his HIV status before getting married. He plans to stop having sex with men, and thinks it is safer to do it with women.

**Table 106: HIV information and personal risk, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of HIV/AIDS</b>				
Yes	375/503	74.4	74.5	69.9 – 79.3
<b>Main source of the most thorough information about HIV/AIDS</b>				
School	44/375	11.7	16.3	10.9 – 22.5
Health services	99/375	26.4	29.1	23.7 – 34.9
Workplace	14/375	3.7	3.1	1.1 – 4.8
Friends/Family	43/375	11.5	10.8	7.4 – 14.1
Television	33/375	8.8	8.4	5.2 – 11.5
Newspaper/Magazines Posters/	23/375	6.1	5.7	2.6 – 8.7
Billboards	3/375	0.8	0.6	0.0 – 1.1
Pamphlets/Leaflets	4/375	1.1	9.2	0.0 – 1.7
Radio	1/375	0.3	0.2	0.0 – 0.6
NGOs	105/375	28.0	23.0	17.9 – 27.5
Other <sup>64</sup>	6/375	1.6	1.1	0.1 – 2.0
<b>Discussed HIV/AIDS with any sexual partner</b>				
Yes, all	40/374	10.7	13.1	7.9 – 18.6
Yes, some	126/374	33.7	28.4	22.6 – 35.1
No, none	208/374	55.6	58.5	51.3 – 66.1
<b>Sexual partner/s told them their HIV status</b>				
Yes, all	22/162	13.6	11.3	6.4 – 15.8
Yes, some	120/162	74.1	75.2	68.1 – 82.4
No, none	20/162	12.3	13.6	8.1 – 19.2
<b>Knows somebody who is HIV-positive or has died of AIDS</b>				
Yes	86/375	22.9	23.2	17.7 – 28.7
<b>Close friend or relative died of HIV/AIDS</b>				
Yes, close friend	9/373	2.4	1.6	0.6 – 2.6
Yes, close relative	32/373	8.6	9.6	5.5 – 13.9
<b>Perception of personal HIV risk</b>				
No risk	116/504	23.0	22.5	17.8 – 27.2
Small risk	221/504	43.8	45.4	40.3 – 50.8
Moderate risk	33/504	6.5	6.3	3.7 – 8.9
High risk	103/504	20.4	19.5	15.1 – 23.8
Don't know	31/504	6.2	6.2	3.6 – 8.8
<b>Reasons for believing they are at risk of contracting HIV</b> (among those who said they were at risk)				
Many sexual partners	207/355	58.3	56.4	50.0 – 62.5
Didn't always use condoms	38/355	10.7	9.9	6.7 – 13.1
Injected drugs	0/355	-	-	-
Partner has other partners	102/355	28.7	30.4	24.9 – 36.2
Don't know	2/355	0.6	0.3	0.0 – 1.0
Other <sup>65</sup>	1/355	0.3	0.5	0.0 – 1.4

<sup>64</sup> Other: In prison (n=1), private company (n=1), rehab center (n=1), MSM club (n=1)

<sup>65</sup> Other: If a casual customer had HIV

Table 106: HIV information and personal risk, MSM Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for believing they are not at risk of contracting HIV</b> (among those who said they were not at risk) (multiple answers possible)				
Trust my partner/s	59/115	51.3	51.2	39.8 – 62.6
Always use condoms	63/115	54.8	54.5	43.0 – 65.8
Don't know	6/116	5.2	4.0	0.6 – 7.2

### 9.1.18 Knowledge of HIV and AIDS

MSM in Colombo correctly answered individual indicators around HIV in the range between 63.3% (can a healthy looking person have HIV) to 82.4% (a person can reduce their risk of HIV transmission by using condoms); however, overall comprehensive knowledge was much lower (29.7%) (Table 107).

Table 107: Knowledge of HIV and AIDS, MSM Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners</b> Yes	415/504	82.3	78.8	73.6 – 83.4
<b>Person can reduce the risk of getting HIV by using a condom every time he/she has sex</b> Yes	425/504	84.3	82.4	78.0 – 86.5
<b>Healthy-looking person can have HIV</b> Yes	329/504	65.3	63.3	57.0 – 69.4
<b>Person can get HIV from mosquito bites</b> No	358/503	71.2	72.2	67.7 – 76.8
<b>Person can get HIV by sharing food with someone who is infected</b> No	401/503	79.7	79.6	75.6 – 83.6
<b>Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission</b> Yes	167/502	33.3	29.7	24.9 – 34.1
<b>GARPR Knowledge Composite Indicator without GARPR (mosquito question)</b> Yes	197/503	39.2	34.9	29.9 – 39.4
<b>HIV can be transmitted from mother to her unborn child</b> Yes	304/504	60.3	56.6	50.1 – 62.6
No	91/504	18.1	21.5	16.8 – 26.7
Don't know	109/504	21.6	21.9	17.1 – 26.7
<b>Ever heard of ART</b> Yes	165/504	32.7	29.8	24.0 – 35.3

### 9.1.19 Stigma related to HIV and AIDS

Stigma indicators amongst MSM in Colombo vary, given that over two thirds (68.4%) agree they would be willing to care for a family member at home who is HIV positive; however, over half (59.6%) would keep their family member's status a secret. Furthermore, only just over half (50.2%) believe an HIV positive student should be allowed to go to school and similarly, just under half (46.1%) would agree to buy food from a food seller who is HIV positive.

**Table 108: Stigma related to HIV and AIDS, MSM Colombo**

Characteristic	Sample proportions		Population estimates		
	n/N	%	%	95% CI	
<b>Agrees to take care of an HIV positive family member at home</b>	Yes	358/504	71.0	68.4	62.9 – 73.7
	Don't know	8/504	1.6	1.2	0.4 – 2.1
<b>Agrees that an HIV positive student should be allowed to continue attending a school</b>	Yes	265/504	52.6	50.2	44.4 – 55.6
	Don't know	10/504	2.0	1.6	0.6 – 2.6
<b>Agrees to buy food from an HIV positive food seller</b>	Yes	240/504	47.6	46.1	40.5 – 51.5
	Don't know	7/504	1.4	1.2	0.3 – 2.0
<b>Thinks that, if a family member becomes HIV positive, his/her HIV status should remain confidential</b>	Yes	290/504	57.5	59.6	54.6 – 65.0
	Don't know	5/504	1.0	0.9	0.2 – 1.7

### 9.1.20 HIV testing

Less than half (43.6%) of MSM in Colombo know where to go for an HIV test, just over a third have ever been tested (28.1%) and less than a quarter (19.6%) have been tested in the last 12 months and know their result. The most common site for HIV testing amongst MSM in Colombo is Government STD clinics, following the same trend as with FSW, and nearly all were very satisfied or satisfied (94.2%) with the quality of the services they received during their last test. More than three quarters (87.8%) of MSM in Colombo told the provider they have sex with men, of those who did not the main reason was 'not necessary to discuss' (81.1%) and being afraid of discrimination (13.1%). The one HIV positive MSM in Galle had never been tested before, and perceived his status to be negative.

**Table 109: HIV testing, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Knows where HIV testing can be obtained</b>				
Yes	243/504	48.2	43.6	36.9 – 49.8
<b>Ever tested for HIV</b>				
Yes	162/504	32.1	28.1	22.2 – 33.3
<b>The test was voluntary</b>				
Yes	153/162	94.4	95.5	92.9 – 98.2
<b>Site where last testing for HIV took place</b>				
Government STD Clinic	141/162	87.0	85.0	76.8 – 92.9
Government non-STD Clinic	4/162	2.5	2.3	0.0 – 4.8
Private Clinic	10/162	6.2	6.0	3.1 – 8.9
Private Pharmacy or Chemist	3/162	1.9	1.9	0.0 – 4.1
Other <sup>66</sup>	6/162	3.7	-	-
<b>Reasons for never getting an HIV test (multiple answers possible)</b>				
Don't know where to go	214/341	62.8	66.9	61.3 – 73.1
Always use condoms	21/341	6.2	4.8	2.7 – 6.6
Not at risk of getting HIV	43/341	12.6	11.5	7.5 – 15.4
Didn't have time/Too busy	106/341	31.1	28.7	23.4 – 33.6
I trust my partner	16/341	4.7	4.9	1.7 – 8.1
Afraid of knowing I may be HIV positive	3/341	0.9	1.0	0.0 – 2.1
Lack of confidentiality	3/341	0.9	0.8	0.0 – 1.8
Inconvenient testing location	11/341	3.2	2.9	1.1 – 4.6
No money	7/341	2.1	1.8	0.5 – 3.1
Other <sup>67</sup>	2/341	0.6	0.3	0.0 – 0.8
<b>Time since last HIV test</b>				
≤ 1 year	127/162	78.4	77.5	57.8 – 96.9
> 1 year	34/162	21.1	22.5	3.1 – 42.2
<b>Knows result of last HIV test</b>				
Yes	146/162	90.1	90.3	84.1 – 96.4
<b>Tested for HIV in the past 12 months and knows result</b>				
Yes (among those who ever tested)	116/162	71.6	70.6	54.6 – 86.3
Yes (among all)	116/504	23.0	19.6	14.4 – 24.4
<b>Reasons for the last HIV test (multiple answers possible)</b>				
Wanted to know my HIV status	148/160	92.5	92.9	87.0 – 98.9
My partner asked me to get tested	6/160	3.8	2.8	0.8 – 4.7
Wanted to start sexual relations with a new partner	3/160	1.9	1.2	0.0 – 2.7
Wanted to get married	0/160	0	0	-
Need for loan/insurance coverage	0/160	0	0	-
Employer requested the test	3/160	1.9	2.4	0.2 – 4.6
Felt sick	1/160	0.6	0.4	0.0 – 1.0
Advised by health worker	4/160	2.5	2.1	0.0 – 4.2
Advised by peer educator	1/160	0.6	0.6	0.0 – 1.9
Other	2/160 <sup>68</sup>	1.3	1.0	0.0 – 2.4

<sup>66</sup> Other: Prison (n=5), Heart to Hearts NGO (n=1)

<sup>67</sup> Other: Did not think it was necessary (n=1), did not want to expose (n=1)

Table 109: HIV testing, MSM Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Result of last HIV test</b>				
HIV-negative	144/161	89.4	89.1	84.3 – 94.1
HIV-positive	0/161	-	-	-
Indeterminate	0/161	-	-	-
Did not get the result	11/161	6.8	7.1	2.7 – 11.4
Don't know	6/161	3.7	3.8	1.0 – 6.6
<b>Reason for not getting last HIV test result</b>				
Didn't have time/Too busy	3/10	30.0	38.0	6.4 – 69.8
Not infected	0/10	-	-	-
Too scared	0/10	-	-	-
Testing centre didn't have result	5/10	50.0	44.6	13.1 – 74.5
Other	2/10	20.0	17.4	0.0 – 44.1
<b>Perception of their current HIV status</b>				
HIV-negative	400/503	79.5	78.0	73.4 – 82.5
HIV-positive	1/503	0.2	0.2	0.0 – 0.4
Don't know	102/503	20.3	21.8	17.3 – 26.4
<b>Satisfaction with quality of services provided during last HIV testing</b>				
Very satisfied	97/162	59.9	62.0	53.3 – 71.3
Satisfied	54/162	33.3	32.2	23.6 – 40.7
A little satisfied	5/162	3.1	2.0	0.2 – 3.7
Not satisfied	3/162	1.9	1.8	0.0 – 3.8
Don't know	3/162	1.9	1.8	0.2 – 3.4
<b>Told health care provider or counsellor that they have sex with men at last HIV testing</b>				
Yes	142/162	87.7	87.8	81.5 – 94.0
<b>Reasons for not telling health care provider or counsellor they have sex with men (multiple answers possible)</b>				
Afraid of discrimination/Not providing testing	4/20	20.0	13.1	0.0 – 26.6
Afraid provider would tell police/legal authorities	1/20	5.0	1.8	0.0 – 4.1
It was not necessary to discuss	16/20	80.0	81.1	64.4 – 97.2
Afraid provider would not keep information confidential	2/20	10.0	5.1	0.0 – 11.0
Little or no contact/interaction with counsellor/provider	0/20	-	-	-
Shy/Embarrassed	0/20	-	-	-
Provider already knew	0/20	-	-	-
Don't know	0/20	-	-	-
Other <sup>69</sup>	1/20	5.0	5.9	0.0 – 16.4
<b>Felt that health care provider or counsellor reacted in a negative or discriminatory way because they have sex with men</b>				
Yes	12/142	8.5	7.0	3.2 – 10.6

<sup>69</sup> Other: Compulsory test (n=1)

Table 109: HIV testing, MSM Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Health care provider or counsellor's behaviour</b>				
(multiple answers possible)				
It was uncomfortable	10/12	83.3	85.8	67.6 – 100.0
Stopped talking to me	0/12	-	-	-
Asked me to leave	0/12	-	-	-
Verbally abused or scolded me	1/12	8.3	9.8	0.0 – 27.4
Other <sup>70</sup>	1/12	8.3	4.5	0.0 – 11.4

### 9.1.21 Experience of stigma, discrimination and violence

Experiences of stigma, discrimination and violence amongst MSM in Colombo are relatively infrequent, with less than five percent of MSM experiencing refusal of health care (2.0%), refusal of police services (4.8%), and physical (3.5%) or sexual (3.2%) abuse (Table 110). The only exception is verbal insults, which just over ten percent of MSM in Colombo have experienced (10.5%).

However, a different picture was given from the qualitative interviews, where MSM expressed strong levels of stigma and discrimination, including from their own families. A MSM Nachchi of 38 years of age said: "Society is not accepting our culture: the main obstacle comes from society. Even in the bus coming here there were school boys calling me names. It is the lower and middle levels of society stigmatizing us. The upper level is educated and accepts us more. If we go out we also face problems with lower levels of the police. They will harass them also".

Another MSM of 40 years said "I could not cope with the situation, I had a very hard time; I worked at 30 different places, but within a month I was usually fired, there was a lot of stigma. I carry two names and I am a transgender and always socialize with females and therefore I am often bullied by males. My family had many issues with me and did not accept me but that has become better now also and I can sometimes go back to the village".

A 20 year old MSM said "I live with my family and my relationship with my sister and mother is okay, but with the rest of the family it is not, my brothers and father are a problem. I really want to go overseas.... I started dressing like a female when I was 15 and then also began taking hormones".

<sup>69</sup> Other: Not MSM at the time

<sup>70</sup> Other: Made him wait a very long time

**Table 110: Experience of stigma, discrimination and violence, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Has been refused health care because someone believed they had sex with men</b> Yes	14/504	2.8	2.0	0.9 – 2.9
<b>Has been refused police assistance because someone believed they had sex with men</b> Yes	17//504	3.4	4.8	1.7 – 8.2
<b>Has been verbally insulted because someone believed they had sex with men</b> Yes	50/504	9.9	10.5	6.5 – 14.6
<b>Has been hit, kicked, or beaten because someone believed they had sex with men</b> Yes	13/504	2.6	3.5	0.9 – 6.2
<b>Has been sexually assaulted or raped</b> Yes	14/504	2.8	3.2	1.0 – 5.3
<b>Type of abuser last time they were sexually assaulted or raped</b>				
Unknown person	8/13	61.5	75.2	51.0 – 100.0
Social acquaintance	2/13	15.4	8.5	0.0 – 23.0
Family member/Relative	0/13	-	-	-
Police	0/13	-	-	-
Client	1/13	7.7	5.4	0.0 – 16.5
Other sex worker	0/13	-	-	-
Pimp	0/13	-	-	-
Non-paying partner or boyfriend	0/13	-	-	-
Other <sup>71</sup>	2/13	15.4	10.8	0.0 – 26.1
<b>Sought medical treatment after sexual assault/rape</b> Yes	3/13	23.1	41.8	53.3 – 81.2
<b>Reported sexual assault/rape to the police</b> Yes	0/13	-	-	-

### 9.1.22 Health care utilization

Less than a quarter of MSM in Colombo have sought health care in the last 12 months, of which none experienced any difficulty (Table 111).

**Table 111: Health care utilization, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Sought medical care for any reason during last 12 months</b> Yes	104/504	20.6	20.5	16.1 – 24.9
<b>Had difficulty getting medical care during last 12 months</b> Yes	0/104	-	-	-

<sup>71</sup> Friend (n=1), supervisor (n=1)



### 9.1.23 Programme coverage

Less than a quarter (14.6%) of MSM in Colombo have been in contact with a peer educator, those that did were mainly given information and HIV and STIs (98.8%) and condoms (74.5%) (Table 112). Only slightly over one fifth (14.1%) of MSM in Colombo met the GARPR prevention programmes indicator.

**Table 112: Programme coverage, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Contact with a health peer educator in the community in the last 6 months</b>				
Yes	75/504	14.9	14.6	10.1 – 19.1
<b>Number of times of contact with a health peer educator in the last 6 months</b>				
1	3/75	4.0	8.4	5.4 – 12.2
2	21/75	28.0	29.9	16.4 – 43.8
≥ 3	51/75	68.0	61.7	47.3 – 74.9
<b>Services or information received from the health peer educator</b>				
General HIV/STI prevention/transmission information	74/75	98.7	98.8	96.4 – 100.0
Condoms	63/75	84.0	74.5	57.7 – 90.0
Referral for STI treatment	7/75	9.3	7.1	2.3 – 11.6
Referral for VCT	0/75	-	-	-
Medical visit	10/75	13.3	12.2	4.6 – 19.7
Other: Lubricants	1/75	1.3	1.4	0.0 – 4.2
<b>Reached with HIV prevention programs (received free condoms in the last 12 months and know where HIV testing can be obtained)</b>				
Yes	120/504	23.8	21.1	15.9 – 24.2

### 9.1.24 Alcohol and drug use

More than two thirds (66.1%) of MSM in Colombo have tried alcohol, with over two thirds (69.2%) having had a drink anywhere between less than once a week to every day, in the last 4 weeks (Table 113). Only 2.1% of MSM in Colombo have injected drugs in the last 12 months (n=11, and a little over half of them shared needles or syringes (n=6)). Drug usage is not common amongst MSM in Colombo, with only a handful of MSM in Colombo having tried the following drugs in the last six months: heroin (12.8%), cannabis (12.7%), cocaine (0.8%), ecstasy (0.2%), amphetamines (0.2%), opium (0%), and hashish (0.4%).

**Table 113: Alcohol and drug use, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever consumed alcohol</b>				
Yes	342/503	68.0	66.1	60.7 – 71.3
<b>Alcohol consumption in the last 4 weeks</b>				
Never drink alcohol	0/342	-	-	-
Never in the last 4 weeks	116/342	33.9	30.4	24.8 – 35.6
Once a week	124/342	36.3	39.0	32.6 – 45.8
Less than once a week	71/342	20.8	20.1	15.4 – 24.8
Every day	30/342	8.8	10.1	5.9 – 14.6
Don't know	1/342	0.3	0.3	0.0 – 0.7
<b>Injected drugs in the last 12 months</b>				
Yes	11/504	2.2	2.1	0.7 – 3.5
<b>Frequency of injecting drugs in the last 12 months</b>				
Once a month or less	7/11	63.6	74.1	39.3 – 100.0
2-4 times a month	2/11	18.2	13.7	0.0 – 39.0
2-3 times a week	1/11	9.1	8.4	0.0 – 46.8
≥ 4 times a week	1/11	9.1	3.8	0.0 – 18.4
<b>Type of drug injected most often</b>				
Heroin	9/11	81.8	86.6	70.0 – 100.0
Meth	0/11	-	-	-
Speedball (heroin + cocaine)	0/11	-	-	-
Other <sup>72</sup>	1/11	9.1	8.5	0.0 – 22.4
<b>Shared needles/syringes in the last 6 months</b>				
Yes	6/11	54.5	46.4	-
<b>Heroin</b>				
Didn't use it in the last 6 months	15/490	3.1	3.2	1.5 – 5.0
Once a month or less	14/490	2.9	3.0	1.3 – 4.7
Several times a month	3/490	0.6	0.6	0.0 – 1.2
2-4 times a month	8/490	1.6	1.2	0.4 – 2.0
2-3 times a week	13/490	2.7	2.5	1.0 – 3.9
≥ 4 times a week	33/490	6.7	5.5	3.3 – 7.6
Have never used	402/490	82.0	83.8	80.0 – 87.8
Don't know	2/490	0.4	0.3	0.0 – 0.6
<b>Cannabis</b>				
Didn't use it in the last 6 months	16/489	3.3	2.8	1.0 – 4.5
Once a month or less	9/489	1.8	2.2	0.2 – 4.3
Several times a month	5/489	1.0	0.9	0.1 – 1.7
2-4 times a month	11/489	2.2	1.8	0.6 – 2.9
2-3 times a week	17/489	3.5	4.7	2.1 – 7.6
≥ 4 times a week	17/489	3.5	3.1	1.5 – 4.7
Have never used	410/489	83.8	83.9	79.6 – 88.1
Don't know	4/489	0.8	0.6	0.0 – 1.2

<sup>72</sup> Other: Morphine (n=1)

Table 113: Alcohol and drug use, MSM Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Cocaine</b>				
Didn't use it in the last 6 months	4/491	0.8	0.7	0.0 – 1.4
Once a month or less	2/491	0.4	0.2	0.0 – 0.6
Several times a month	0/491	-	-	-
2-4 times a month	1/491	0.2	0.2	0.0 – 0.5
2-3 times a week	1/491	0.2	0.1	0.0 – 0.3
≥ 4 times a week	1/491	0.2	0.3	0.0 – 0.8
Have never used	475/491	96.7	96.7	95.1 – 98.4
Don't know	7/491	1.4	1.7	0.5 – 2.9
<b>Ecstasy</b>				
Didn't use it in the last 6 months	3/491	0.6	0.5	0.0 – 1.1
Once a month or less	0/491	-	-	-
Several times a month	0/491	-	-	-
2-4 times a month	1/491	0.2	0.2	0.0 – 0.5
2-3 times a week	0/491	-	-	-
≥ 4 times a week	0/491	-	-	-
Have never used	478/491	97.4	96.8	95.1 – 98.4
Don't know	9/491	1.8	2.5	1.1 – 4.1
<b>Amphetamines</b>				
Didn't use it in the last 6 months	3/491	0.6	0.5	0.0 – 1.1
Once a month or less	0/491	-	-	-
Several times a month	1/491	0.2	0.2	0.0 – 5.6
2-4 times a month	0/491	-	-	-
2-3 times a week	0/491	-	-	-
≥ 4 times a week	0/491	-	-	-
Have never used	479/491	97.6	97.1	95.2 – 98.9
Don't know	8/491	1.6	2.2	0.3 – 3.8
<b>Opium</b>				
Didn't use it in the last 6 months	4/491	0.8	0.7	0.0 – 1.3
Once a month or less	0/491	-	-	-
Several times a month	0/491	-	-	-
2-4 times a month	0/491	-	-	-
2-3 times a week	0/491	-	-	-
≥ 4 times a week	0/491	-	-	-
Have never used	479/491	97.6	97.1	95.5 – 98.7
Don't know	8/491	1.6	2.2	0.8 – 3.7
<b>Hashish</b>				
Didn't use it in the last 6 months	4/491	0.8	0.7	0.0 – 1.3
Once a month or less	0/491	-	-	-
Several times a month	1/491	0.2	0.2	0.0 – 0.6
2-4 times a month	1/491	0.2	0.2	0.0 – 0.5
2-3 times a week	0/491	-	-	-
≥ 4 times a week	0/491	-	-	-
Have never used	478/491	97.4	97.1	95.3 – 98.8
Don't know	7/491	1.4	1.9	0.5 – 3.3

### 9.1.25 Media usage

Over two thirds of all MSM in Colombo watch TV (83.3%) or listen to the radio (70.7%) somewhat regularly (i.e. once a week, most days, or every day) (Table 114). A lesser percentage read the newspaper (43.7% read the newspaper once a week, most days, or every day), and even fewer use

the internet (17.8% surf the internet once a week, most days, or every day). The internet is not a commonly used tool to find sexual partners, with only 7.3% ever using the internet for this purpose. More than three quarters of MSM in Colombo have a mobile phone (80.5%) and use their mobile to communicate with other MSM (76.9%). Nearly three quarters (74.5%) of respondents would be interested in receiving text messages relating to HIV and health, and even (87.8%) more would be interested in attending learning activities.

**Table 114: Media usage, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Radio</b>				
Never	155/504	30.8	29.1	23.8 – 34.2
Once a month	1/504	0.2	0.2	0.0 – 4.9
Once a week	13/504	2.6	2.9	1.3 – 4.5
Most days	222/504	44.0	47.7	42.6 – 53.4
Every day	113/504	22.4	20.1	15.9 – 24.0
<b>TV</b>				
Never	85/504	16.9	16.7	12.5 – 20.9
Once a month	0/504	0	0	-
Once a week	10/504	2.0	1.6	0.5 – 2.6
Most days	215/504	41.7	41.7	36.3 – 46.9
Every day	194/504	38.5	40.0	34.6 – 45.5
<b>Newspaper</b>				
Never	272/504	54.0	53.6	47.8 – 59.3
Once a month	15/504	3.0	2.6	1.2 – 4.2
Once a week	67/504	13.3	14.2	10.3 – 18.2
Most days	95/504	18.8	18.1	14.1 – 21.9
Every day	55/504	10.9	11.4	7.8 – 15.2
<b>Internet</b>				
Never	407/504	80.8	82.2	78.2 – 86.4
Once a month	7/504	1.4	1.0	0.3 – 1.8
Once a week	10/504	2.0	2.0	0.8 – 3.2
Most days	30/504	6.0	7.0	4.0 – 10.0
Every day	50/504	9.9	7.8	5.3 – 9.9
<b>Frequency of using the Internet to find sexual partners</b>				
Never	464/504	92.1	92.7	90.1 – 95.4
Once a month	6/504	1.2	0.9	0.2 – 1.5
Once a week	8/504	1.6	1.2	0.4 – 1.9
Most days	22/504	4.4	4.5	2.1 – 7.0
Every day	4/504	0.8	0.7	0.1 – 1.4
<b>Has a mobile phone</b>				
Yes	408/503	81.1	80.5	76.0 – 84.8
<b>Uses mobile phone to communicate with other MSM</b>				
Yes	325/408	79.7	76.9	71.6 – 81.8
<b>Interested in receiving HIV and health-related text messages</b>				
Yes	309/408	75.7	74.5	69.3 – 79.5
<b>Interested in attending learning activities</b>				
Yes	442/503	87.9	87.8	84.7 – 90.8

### 9.1.26 Network size and multiplier questions

MSM in Colombo estimate the average number of MSM living in Colombo to be 4,750 MSM, of whom an estimated average 4,000 are above the age of 18 (Table 115). With regard to multiplier questions, nearly a quarter (24.7%) have been treated at an STD clinic in 2014. Unfortunately, as data around catchment area from STD clinic monitoring data is not available, the multiplier questions cannot be calculated.

MSM interviewed, however, said that it was hard to access MSM from the higher socio-economic class. "Especially people from the higher positions don't come here (IBBS). The MSM that participate are from the middle and lower class" They also mentioned that these high class MSMs do not go to the STD clinics.

**Table 115: Network size and multiplier questions, MSM Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Estimation of the number of MSM who live in Colombo</b>	504/504	-	-	-
Mean	3,791.8	-	4,750.4	-
SD	7,480.8	-	11,369.4	-
Median	2,500.0	-	2,725	-
Range	20 -100,000	-	-	-
<b>Estimation of the number of MSM older than 18 who live in Colombo</b>	504/504	-	-	-
Mean	3,791.8	-	4,000.7	-
SD	7,480.8	-	10,373.4	-
Median	2,500.0	-	2,200	-
Range	20 -100,000	-	-	-
<b>Number of MSM older than 18 seen in the last month</b>	504/504	-	-	-
Mean	7.2	-	5.3	-
SD	4.3	-	4.0	-
Median	6.0	-	5.0	-
Range	1 - 20	-	-	-
<b>Treated at Government STD (NSACP) clinic in 2014</b>				
Yes	118/504	23.4	20.3	15.4 - 24.7
<b>NSCAP clinics visited in 2014<sup>73</sup></b>				
Colombo STD clinic	76/504	15.1	13.4	9.6 - 17.0
Ragama STD clinic	19/504	3.8	3.7	1.5 - 6.0
Kalubowila STD clinic	16/504	3.2	2.3	1.2 - 3.3
Negambo STD clinic	4/504	0.8	0.3	0.0 - 0.6
Chilaw STD clinic	1/504	0.2	0.1	0.0 - 0.3
Kalutara STD clinic	1/504	0.2	0.2	0.0 - 0.4

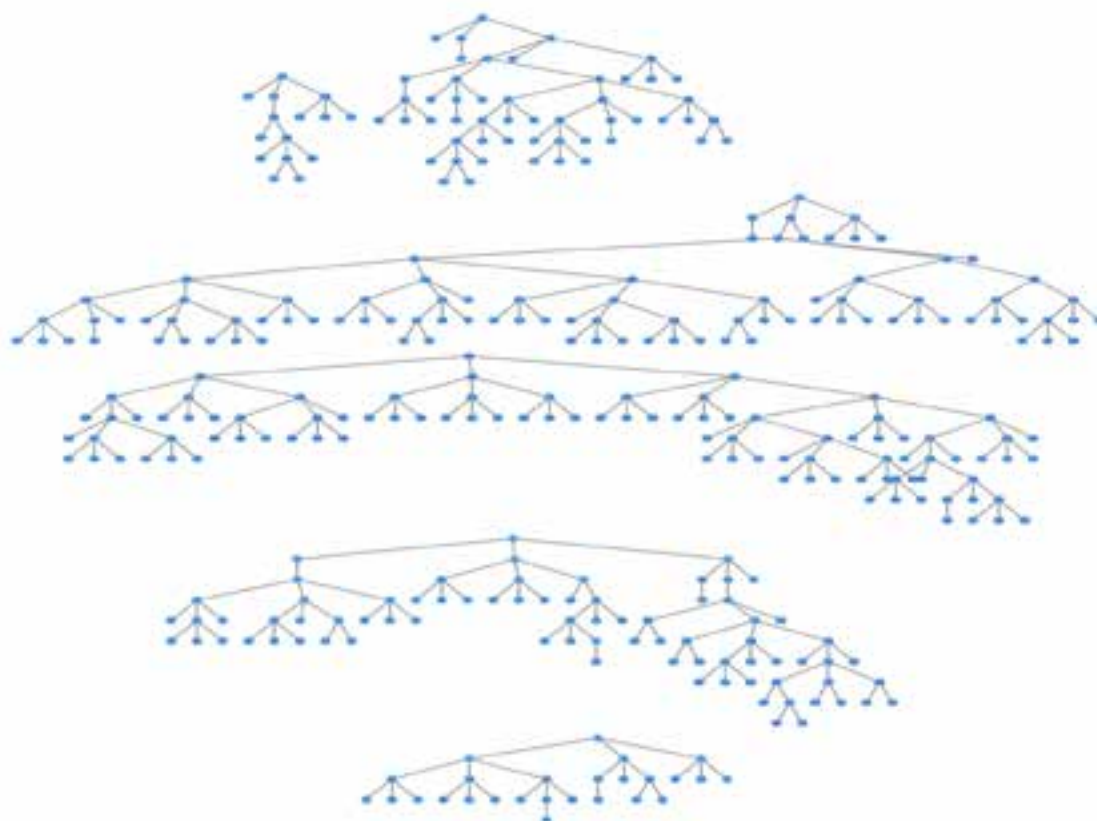
## 9.2 Galle

Overall the research team enrolled a total of 355 MSM in Galle, including 6 seeds, surpassing the target of n=350. Seeds were recruited based on assistance from local NGOs and contacts established during the FA. The Gile's SS Estimator in RDS-A was used, with a population size estimate of 1,078 (low estimate of 355, and a high estimate of 1,800), 0.95 confidence interval and 5000 bootstraps.

### 9.2.1 Network properties

Although six seeds were initiated, most of the recruitment originated from three seeds, as shown in the recruitment tree in Figure 15. Two participants reported network sizes of 50 and 1000 MSM, therefore their network sizes were lowered to 40, the 99th percentile value. Furthermore, 42 participants (11.8%) did not report a network size, and were imputed with the median value of 6. The strength of association between NET and NSF was very strong,  $r = 0.94$  ( $p < 0.001$ ).

**Figure 15: Recruitment tree, MSM Galle**

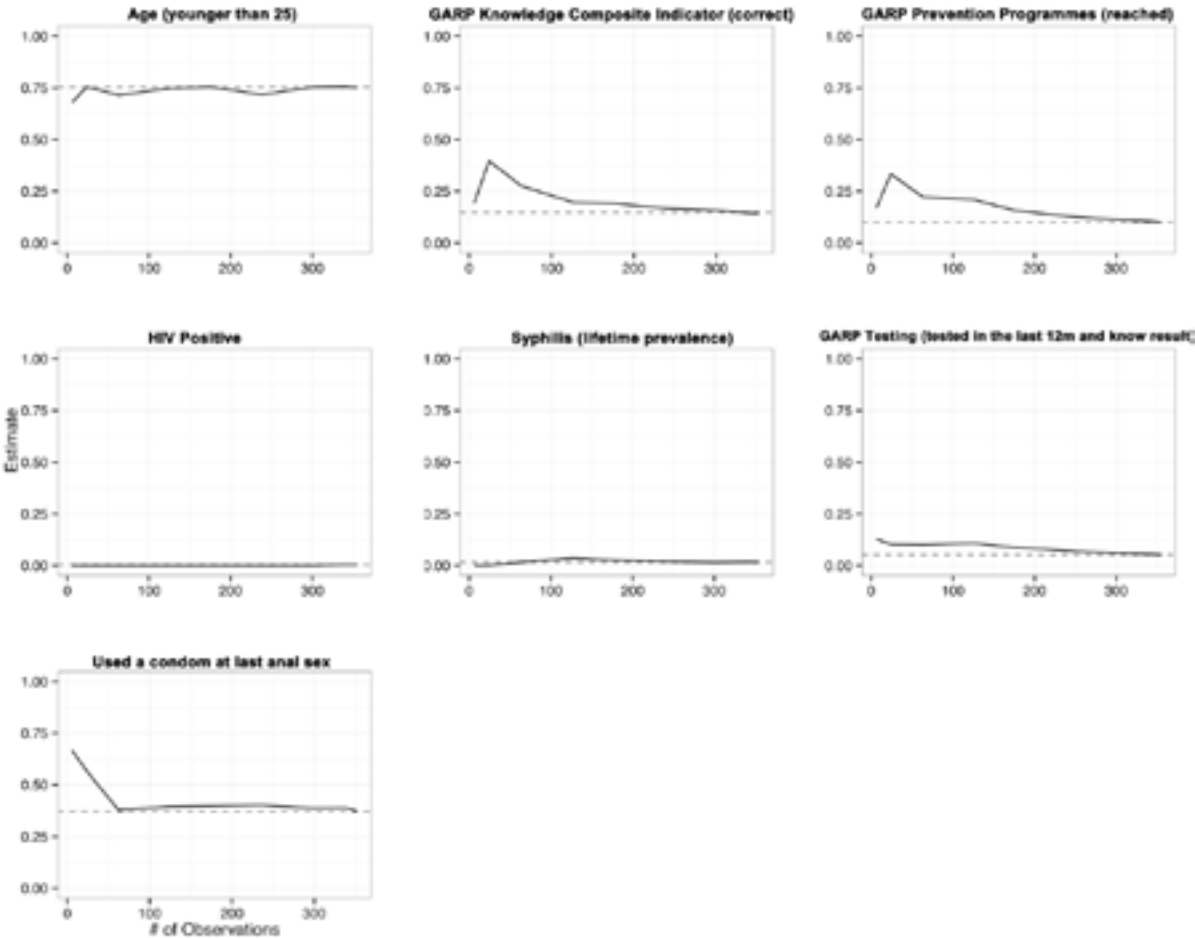


### 9.2.2 Convergence

Convergence was reached on all key indicators; however the convergence is not perfect for the GARPR knowledge composite indicator, HIV testing and GARPR prevention programmes (Figure 16). As the converging line is close to the population estimates for those indicators and the sample size has been reached, this slight deviation does not have an impact on the results interpretation.

<sup>73</sup> 139 of 144 (96.5%) who said they were treated in the Government STD clinic provided name of the clinic, date and year, 22 of those 139 tested before 2014, leaving 117 in total.

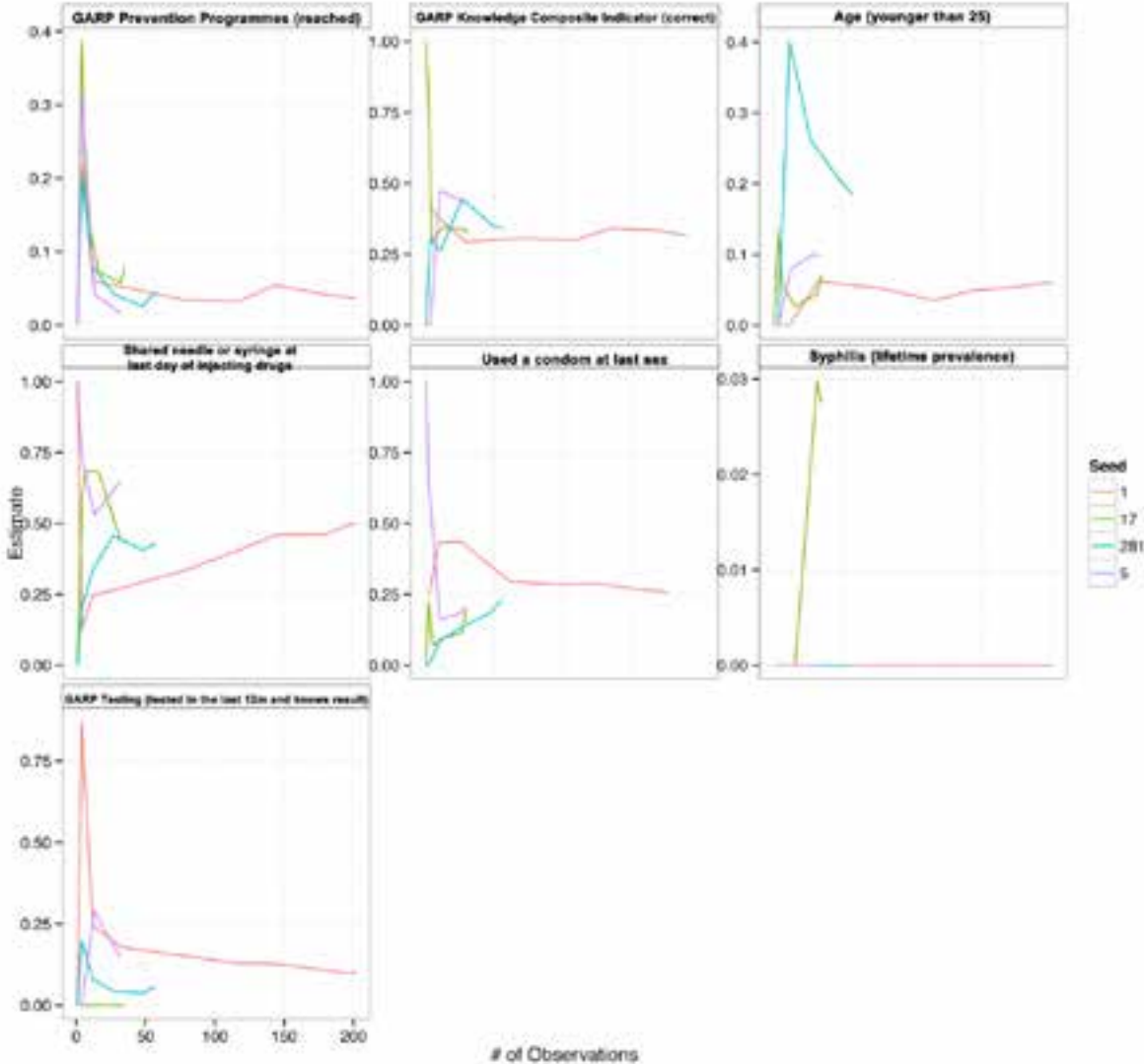
**Figure 16: Convergence on key indicators, MSM Galle**



**9.2.3 Bottleneck plots**

There does not appear to be any strong evidence of bottlenecks amongst the MSM Galle data (Figure 17).

**Figure 17: Bottleneck plots, MSM Galle**



**9.2.4 Homophily**

Homophily amongst MSM in Galle ranges from 0.97 to 1.83 (Table 116). Homophily for the HIV testing variable (1.83) is on the higher end; however due to the large sample size, lack of bottlenecks, and relatively strong convergence, this is not of great concern.



**Table 116: Homophily, MSM Galle**

Indicator	Recruitment homophily	Estimated population homophily
HIV	1.00	-
Active syphilis	1.00	-
Condom use at last anal sex	1.00	0.97
Received free condoms from NGOs or a health care centre in the last 12 months and know where to obtain an HIV test	1.1*	1.7
Correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	1.08*	1.40
Tested for HIV in the past 12 months and knows result	1.05*	1.83

### 9.2.5 Study and recruiter information

The most common reason for participation in the IBBS survey was for the HIV test (83.1%) and a friend wanted them to participate (7.3%), followed by interest in HIV and sexual health (5.6%) (Table 117). A handful of participants found the coupon (n=2), but otherwise most (99.4%) received from a friend or acquaintance. Furthermore, the screener was 100% confident or somewhat confident, that all respondents were genuine MSM.

**Table 117: Study and recruiter information, MSM Galle**

Characteristic	Sample proportions	
	n/N	%
<b>Main reason for participation in the study</b>		
Interest in HIV and sexual health	20/355	5.6
HIV test	295/355	83.1
Interest in issues related to MSM	8/355	2.3
Helping the community	0/355	0
Friend wanted me to participate	26/355	7.3
Someone forced me	3/355	0.8
Incentive/Gift	3/355	0.8
<b>Mode of receiving the coupon</b>		
From a friend/acquaintance	347/349 <sup>74</sup>	99.4
Found it	2/349	0.6
Bought it/Exchanged it for something	0/349	-
<b>Length of time they knew the person who gave them the coupon</b>		
< 6 months	32/347	9.2
6 months – 1 year	35/347	10.1
> 1 year	273/347	78.7
Don't know	7/347	2.0
<b>Screener's confidence that participant is MSM</b>		
Confident	351/355	98.9
Somewhat confident	4/355	1.1
Not confident	0/355	-

<sup>74</sup> Seeds not included as these coupons were purposefully distributed by the IBBS survey team

## 9.2.6 Biological survey results

The prevalence of HIV and active syphilis amongst men in Galle is 0.4% and 0.3%, respectively (Table 118).

**Table 118: Biological survey results, MSM Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>HIV</b>	1/355	0.3	0.4	0.0 – 0.9
<b>Syphilis – Active</b>	1/355	0.3	0.3	0.0 – 0.7
<b>Syphilis – Non-Active</b>	4/355	1.4	1.8	0.3 – 3.5
<b>Syphilis – Total (active and non-active)</b>	6/355	1.7	2.1	0.5 – 3.8

## 9.2.7 Socio-demographic characteristics

The average age of MSM in Galle is 23.2 years, with more than three quarters of the population under the age of 25 (Table 119). Six respondents (1.7%) indicated they are currently a different sex than at birth.<sup>75</sup> All MSM were born in Sri Lanka, most have had Galle as a residence for the past year (95.3%), and lived in Galle for one year or more (99.1%). Most MSM in Galle are Sinhalese (99.5%), speak Sinhalese at home (99.1%), are literate (95.1%), and have completed up to their O levels (55.4%). Most respondents earn between 10,000 and 30,000 rupees per month (48.6%), and support at least one other person financially (83.6%), ranging between 1 and 34 persons. Most MSM in Galle are unemployed, but those who do have occupations are predominantly waiters/bartenders/hotel employees (15.1%), factory workers (12.2%) and casual labourers (10.1%).

**Table 119: Socio-demographic characteristics, MSM Galle**

Characteristic	Sample proportions		Population estimates		
	n/N	%	%	95% CI	
<b>Age</b>	Mean	355/355	-	23.2	-
	SD	23.1	-	7.4	-
	Median	6.7	-	20.0	-
	Range	20.0	-	-	-
<b>Age groups</b>	Aged under 20	18 - 55	-	-	-
	Aged under 25	137/355	38.6	43.0	38.6 – 49.5
	18 – 24	267/355	75.2	75.4	70.6 – 80.3
	25 – 34	267/355	75.2	75.4	70.6 – 80.3
	35 – 44	66/355	18.6	17.1	13.2 – 20.4
	≥ 45	12/355	3.4	3.9	1.9 – 6.1
<b>Sex</b>	Female	10/355	2.8	3.6	1.5 – 5.9
	Male	355/355	100	100	-
<b>Sex same as at birth</b>	Yes	349/355	98.3	97.6	95.5 – 99.3

<sup>75</sup> Sample proportion used as sample size small.

Table 119: Socio-demographic characteristics, MSM Galle (Continued)

Characteristic		Sample proportions		Population estimates	
		n/N	%	%	95% CI
<b>Citizenship</b>	Sri Lankan	355/355	100	100	-
	Other	0/355	-	-	-
<b>Country of birth</b>	Sri Lanka	355/355	100	100	-
	Other	0/355	-	-	-
<b>Ethnicity</b>	Sinhalese	353/355	99.4	99.5	99.0 – 100.0
	Sri Lankan Tamil	0/355	-	-	-
	Indian Tamil	0/355	-	-	-
	Moor	2/355	0.6	0.5	0.0 – 1.0
	Burgher	0/355	-	-	-
	Malay	0/355	-	-	-
	Other	0/355	-	-	-
	<b>District of residence during the past one year</b>				
	Colombo	10/355	2.8	3.0	1.3 – 4.7
	Kandy	1/355	0.3	0.4	0.0 – 0.8
	Galle	340/355	95.8	95.3	93.0 – 97.4
	Other	4/355	1.1	1.3	0.0 – 2.8
<b>Length of time lived in Galle</b>	< 1 year	2/354	0.6	0.9	0.0 – 20.1
	≥ 1 year	352/354	99.4	99.1	98.0 – 100.0
<b>Primary residence</b>	Galle	342/355	96.3	96.0	94.0 – 97.9
	Other	13/355	3.7	4.0	2.1 – 6.0
<b>Language spoken at home</b>	Sinhalese	352/355	99.2	99.1	98.4 – 99.8
	Tamil	2/355	0.6	0.5	0.0 – 0.9
	English	1/355	0.3	0.1	0.0 – 0.1
	Other	0/355	-	-	-
<b>Literate</b>	Yes	340/355	95.8	95.1	92.7 – 97.3
<b>Highest level of education</b>	Never attended school	1/355	0.3	0.3	0.0 – 0.7
	Grade 1-5	11/355	3.1	4.1	2.2 – 6.6
	Grade 6-10	136/355	38.3	40.2	35.0 – 46.4
	Passed O/L	136/355	38.3	38.0	33.1 – 42.7
	Passed A/L	70/355	19.7	17.3	12.9 – 20.4
	Completed Diploma	0/355	-	-	-
	Completed Degree	1/355	0.3	0.1	0.0 – 0.2
<b>Currently a student</b>	Yes	28/355	7.9	6.8	4.4 – 8.7
<b>Type of institution enrolled in (among current students)</b>	University	4/28	14.30	13.2	3.5 – 23.0
	Technical College	2/28	7.1	5.8	0.4 – 10.3
	Vocational School	10/28	35.7	37.5	21.9 – 54.1
	Other	13/28	46.4	46.9	30.8 – 62.8

Table 119: Socio-demographic characteristics, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Monthly personal income</b>				
< 5,000 Rupees	28/331	8.5	9.2	6.3 – 12.4
5,000-10,000	23/331	6.9	7.7	4.8 – 11.0
10,001-20,000	87/331	26.3	24.3	19.4 – 28.2
20,001-30,000	84/331	25.4	24.3	19.5 – 28.5
30,001-40,000	24/331	7.3	6.7	4.1 – 9.0
> 40,000	10/331	3.0	4.1	1.5 – 7.1
Don't know	75/331	22.7	23.8	18.7 – 29.5
<b>Number of people that financially depend on that income</b>				
0	59/323	18.3	16.4	12.0 – 19.9
1	136/323	42.1	44.4	39.4 – 50.5
2	24/323	7.4	6.6	4.2 – 8.7
3	24/323	14.2	13.1	9.6 – 16.1
4	46/323	8.4	9.1	5.3 – 13.2
5 and more	31/322	9.6	10.4	7.2 – 13.9
<b>Occupation</b>				
Street vendor/casual labourer	26/297	8.8	10.1	6.5 – 14.4
Factory worker	39/297	13.1	12.2	8.3 – 15.7
Professional/banker/accountant	8/297	2.7	2.0	0.6 – 15.7
Teacher	5/297	1.7	1.6	0.0 – 3.0
Business owner	8/297	2.7	1.9	0.5 – 2.9
Hairdresser/beautician/masseur	10/297	3.4	3.1	0.4 – 5.7
Waiter/bartender/hotel employee	41/297	13.8	15.1	10.8 – 20.0
Musician/dancer/performer	12/297	4.0	3.9	1.6 – 6.6
Tourism/travel agent/tour guide	7/297	2.4	1.9	0.5 – 3.2
Government worker	7/297	2.4	2.3	0.5 – 4.1
Security guard	3/297	1.0	0.9	0.1 – 1.5
Fisherman/seafarer	23/297	7.7	9.2	4.6 – 14.6
Farmer/agriculture worker	2/297	0.7	0.5	0.0 – 1.0
Taxi driver/Three wheeler driver	14/297	4.7	4.6	1.9 – 7.3
Other: Unemployed	60/297	20.2	20.2	15.4 – 25.0
Other: Student	7/297	2.4	1.7	0.4 – 2.8
Other: Army	11/297	3.7	3.7	1.1 – 6.4
Other	14/297 <sup>76</sup>	4.7	5.0	2.2 – 8.1

Most MSM in Galle are single (89.8%), living with their parents (83.3%) and with siblings (47.7%) (Table 120). Few MSM currently have children (8.6%).

The fact that the majority of the MSM are single can also be explained by their young average age. A young MSM of 19 said in relation to marriage: "I know some nachchi who are married, but they are 30, 40 or even 50 years old. I do not want to get married. I am only 19, so my family is not pressuring me into marriage. In the future, they may tell me though". His family is not aware that he is a nachchi. His family has seen pictures of him where he is dressed up as a female, but they did not recognize him. They thought it was pictures of a lady.

<sup>76</sup> Other: Carpenter (n=2), photo graphics (n=1), book shop (n=1), electrician (n=2), excavator operator (n=1), painter (n=4), mason (n=2), attendant in private hospital (n=1)

**Table 120: Marital status, living arrangement, and children, MSM Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Marital status</b>				
Single (never married)	320/355	90.1	89.8	86.7 – 92.8
Living together but not married	0/355	0.0	-	-
Married	32/355	9.0	8.8	6.0 – 11.5
Divorced/Separated	3/355	0.8	1.4	0.0 – 3.1
Widowed	0/355	-	-	-
<b>Mode of living</b>				
(multiple answers possible)				
Alone	18/355	5.1	5.1	3.0 – 7.3
With husband /wife	32/355	9.9	8.8	6.0 – 11.5
With other sexual partner	1/355	0.3	0.2	0.0 – 0.4
With parents	293/355	82.5	83.3	79.9 – 87.0
With siblings	170/355	47.9	47.7	42.6 – 52.9
With children	22/355	6.2	6.3	4.1 – 8.8
With other family/relatives	8/355	2.3	2.1	0.8 – 3.4
With friend/roommate (not sexual partner)	1/355	0.3	0.3	0.0 – 5.9
With co-workers	1/355	0.3	0.3	0.0 – 0.7
<b>Type of residence</b>				
Temporary shelter	4/355	1.1	1.1	0.3 – 1.9
Boarding house	6/355	1.7	1.7	0.5 – 2.8
Parents' home	203/355	57.2	55.5	49.5 – 60.9
My home	137/355	38.6	40.0	34.6 – 46.1
Lodging	2/355	0.6	0.5	0.0 – 0.9
On the street	0/355	-	-	-
Brothel	0/355	-	-	-
Other	3/355	0.8	1.2	0.0 – 2.5
<b>Has children</b>				
Yes	30/355	8.5	8.6	5.8 – 11.4
<b>Number of children</b>				
1	12/30	40.0	39.8	0.0 – 100.0
2	13/30	43.3	43.0	0.0 – 100.0
3	3/30	10.0	8.4	0.0 – 17.3
4	2/30	6.7	8.7	0.0 – 20.8
5 or more	0/30	-	-	-
<b>Belongs to MSM group</b>				
Nachchi	33/354	9.3	9.9	6.4 – 13.5
Male sex worker	40/354	11.3	10.7	7.5 – 13.5
Other MSM	281/354	79.4	79.5	74.9 – 84.0

### 9.2.8 General sexual history

More than half (57.5%) of MSM in Galle have had sex with a woman and almost all (99.2%) have had anal sex with a man (Table 121). The average age of first anal sex with a man is 17.7, and the average age of the partner at first anal sex is 25.4. The average number of total sexual partners in the last seven days is 1.8, with more casual partners than regular, at 1.3 and 0.9, respectively. The distribution of number of sex partners in the last seven days ranges between zero to twenty, with most MSM in Galle having had sex with one person in the last seven days (29.6%). The number of casual and regular partners is approximately the same, with 60.4% of MSM having had one or more casual partners in the last seven days, compared with 62.5% who have had one or more regular

partners. Less than a third (37.2%) of MSM in Galle used a condom at last anal sex. The MSM in Galle who was HIV positive used a condom at last anal sex (data not shown).

**Table 121: General sexual history, MSM Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever had sex with a <u>woman</u></b> (vaginal or anal)				
Yes	199/355	56.1	57.5	52.2 – 63.5
<b>Ever had anal sex with a <u>man</u></b>				
Yes	352/355	99.2	99.2	98.4 – 99.9
<b>Age at first anal sex with a man</b>	347/355			
Mean	17.7	-	17.7	-
SD	3.9	-	3.9	-
Median	17.0	-	17.0	-
Range	3 – 45	-	-	-
<b>Age groups at first anal sex with a man</b>				
< 16	59/347	17.0	16.4	12.5 – 19.9
16 – 18	203/347	58.5	59.6	54.5 – 65.2
19 – 24	67/347	19.3	18.8	14.6 – 22.5
≥ 25	18/347	5.2	5.3	3.0 – 7.7
<b>Age of partner at first anal sex with a man</b>	333/355			
Mean	25.3	-	25.4	-
SD	7.6	-	7.7	-
Median	25.0	-	25.0	-
Range	10 – 55	-	-	-
<b>Age groups of partner at first anal sex with a man</b>				
< 16	19/333	5.7	5.4	3.2 – 7.5
16 – 18	46/333	13.8	14.7	10.7 – 19.1
19 – 24	97/333	29.1	28.2	23.4 – 32.7
≥ 25	171/333	51.4	51.7	46.4 – 57.1
<b>Number of <u>all</u> sexual partners in the last 7 days</b>				
Mean	1.7	-	1.8	-
SD	2.0	-	1.9	-
Median	1.0	-	1.0	-
Range	0-20	-	-	-
0	80/355	22.5	21.6	17.5 – 25.3
1	106/355	29.9	29.6	25.0 – 34.2
2	93/355	26.2	28.1	23.8 – 33.3
3 or more	76/355	21.4	20.7	16.3 – 24.7

Table 121: General sexual history, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of <u>casual</u> sexual partners in the last 7 days (among those who reported at least one sex partner)</b>				
Mean	1.2	-	1.3	-
SD	1.8	-	1.9	-
Median	1.0	-	1.0	-
Range	0-17	-	-	-
0	109/275	39.6	36.8	29.7 – 42.4
1	78/275	28.4	29.7	23.8 – 36.4
2	59/275	21.5	21.7	16.8 – 26.7
3 or more	29/275	10.5	11.8	7.1 – 17.2
<b>Number of <u>regular</u> sexual partners in the last 7 days (among those who reported at least one sex partner)</b>				
Mean	1.0	-	0.9	-
SD	1.1	-	1.1	-
Median	1.0	-	1.0	-
Range	0-8	-	-	-
0	103/275	37.5	40.4	35.1 – 47.0
1	104/275	37.8	37.7	31.8 – 43.6
2	41/275	14.9	14.2	10.0 – 18.2
3 or more	27/275	9.8	7.7	4.2 – 10.0
<b>Number of <u>all</u> sexual partners in the last 6 months</b>				
Mean	12.5	-	12.4	-
SD	17.7	-	13.7	-
Median	10.0	-	10.0	-
Range	1-300	-	-	-
0	0/355	-	-	-
1	10/355	2.8	2.3	1.0 – 3.2
2	16/355	4.5	5.1	2.7 – 7.7
3 – 5	61/355	17.2	14.4	10.5 – 16.9
6 or more	268/355	75.5	78.3	74.7 – 83.2
<b>Number of <u>casual</u> sexual partners in the last 6 months</b>				
Mean	8.3	-	8.4	-
SD	16.6	-	12.4	-
Median	6.0	-	7.0	-
Range	0-290	-	-	-
0	51/355	14.4	12.6	8.9 – 15.5
1	12/355	3.4	3.3	1.7 – 5.0
2	29/355	8.2	7.7	5.0 – 10.3
3 – 5	73/355	20.6	19.0	15.0 – 22.4
6 or more	190/355	53.5	57.3	53.1 – 63.2

Table 121: General sexual history, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of regular sexual partners in the last 6 months</b>				
Mean	4.2	-	4.0	-
SD	5.8	-	5.8	-
Median	3.0	-	2.0	-
Range	0-71	-	-	-
0	50/355	14.1	14.7	11.3 – 18.5
1	52/355	14.6	14.5	11.2 – 17.7
2	74/355	20.8	21.4	17.2 – 25.8
3 – 5	107/355	30.1	30.9	26.3 – 36.0
6 or more	72/355	20.3	18.5	14.3 – 21.8
<b>Had anal sex with partners in the last 6 months</b>				
Every time	103/351	29.3	31.8	27.3 – 37.4
Almost every time	64/351	18.2	18.4	14.4 – 22.5
Sometimes	162/351	46.2	43.1	37.1 – 47.6
Never	20/351	5.7	6.1	0.4 – 8.7
Don't know	2/351	0.6	0.6	0.0 – 1.4
<b>Used a condom at last anal sex</b>				
Yes	133/352	37.8	37.2	32.2 – 41.9
No	219/352	62.2	62.8	58.1 – 67.8

### 9.2.9 Experience with sex work

Nearly half (44.5%) of all MSM have received money, goods or services in exchange for sex in their lifetime, and over a third (38.6%) have done so in the past 12 months, with a male partner on the last occasion sex was exchanged (93.3%) (Table 122). Furthermore, 17.5% have given money, goods, or services for sex, 14.8% in the last 12 months, but the gender breakdown is split, half paid for sex from a woman (49.3%, and half paid for sex from a man (50.7%). The last time MSM in Galle paid for sex, a condom was used less than half the time (41.9%).

Table 122: Experience with sex work, MSM Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever received money, goods or services in exchange for sex</b>				
Yes	165/354	46.6	44.5	38.6 – 49.3
<b>Received money, goods or services in exchange for sex in last 12 months</b>				
Yes (among those who ever sold sex)	145/165	87.9	86.8	80.5 – 92.5
Yes (among all)	145/354	41.0	38.6	33.1 – 43.0
<b>Sex of partner last time they received money, goods or services in exchange for sex</b>				
Female	11/165	6.7	6.7	2.5 – 10.9
Male	154/165	93.3	93.3	89.1 – 97.5



Table 122: Experience with sex work, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Used a condom last time they received money, goods or services in exchange for sex</b>				
Yes	56/165	33.9	32.5	25.2 – 39.0
<b>Ever given money, goods or services in exchange for sex</b>				
Yes	63/355	17.7	17.5	13.4 – 21.5
<b>Given money, goods or services in exchange for sex in last 12 months</b>				
Yes (among those who ever bought sex)	54/63	85.7	84.3	78.0 – 89.8
Yes (among all)	54/355	15.2	14.8	10.8 – 18.5
<b>Sex of partner last time they gave money, goods or services in exchange for sex</b>				
Female	36/63	57.1	49.3	31.2 – 64.0
Male	27/63	42.9	50.7	36.0 – 68.8
<b>Used a condom last time they gave money, goods or services in exchange for sex</b>				
Yes	28/63	44.4	41.9	23.5 – 59.2

### MSM Galle

A MSM of 19 explained that, while he mostly stays with his boyfriend, he occasionally has another partner. He said that it is difficult to always use a condom in those cases. “You cannot carry a condom everywhere. For instance when I go to a musical show, and when I meet someone there”. He only carries condoms and lubricants when he has a properly arranged meeting at a dance competition. With his friend, he does not use condoms, He knows that his boyfriend does not have sex with any other person. He has not told his boyfriend that he occasionally has sex with others.

#### 9.2.10 Sexual behaviour with casual male partners

Just over half (51.6%) of all MSM in Galle used a condom almost every time they had sex with casual male partners, in the last six months; however, at last sex specifically (with a male casual partner) condom use was only 29.9% (Table 123). Typically the MSM themselves suggested condom use (85.3%) rather than their sexual partner (14.7%). Reasons for using condoms include to prevent HIV and STIs (77.4%) and not trusting their partner (30.4%). Reasons for not using condoms include lack of availability (39.3%) and not thinking it was necessary (17.1%). Last casual partners were typically met in the street/park/public transport (47.3%) or through friends (10.3%). Most MSM did not know their last casual partner’s HIV status (59.4%).

**Table 123: Sexual behaviour with casual male partners, MSM Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Condom use during last 6 months</b>				
Every time	119/345	33.6	34.2	29.4 – 39.2
Almost every time	179/345	50.6	51.6	46.9 – 56.8
Sometimes	45/345	12.7	11.6	8.1 – 14.6
Never	8/345	2.3	1.9	0.6 – 3.1
Don't know	3/345	0.8	0.7	0.0 – 1.2
<b>Used a condom at last anal sex</b>				
Yes	119/298	33.6	29.9	34.5 – 45.1
<b>Person who suggested to use a condom</b>				
MSM did	104/119	87.4	85.3	76.3 – 93.3
Partner did	15/119	12.6	14.7	6.7 – 23.7
<b>Reasons for using a condom</b> (multiple answers possible)				
To prevent HIV/STIs	96/119	80.7	77.4	69.4 – 84.6
Do not trust partner	34/119	28.6	30.4	21.5 – 40.2
Messages advising use of condoms	14/119	11.8	10.7	5.6 – 15.3
To prevent pregnancy	0/119	-	-	-
Other	1/119	0.8	0.7	0.0 – 1.5
Don't know	4/119	3.4	5.3	1.0 – 10.5
<b>Reasons for <u>not</u> using a condom</b> (multiple answers possible)				
Never heard of condoms	13/179	7.3	10.0	5.6 – 15.7
Don't know how to obtain condoms	10/179	5.6	6.5	2.9 – 10.5
Didn't think it was necessary	33/179	18.4	17.1	10.5 – 23.1
Didn't think of it	13/179	7.3	6.8	2.8 – 10.7
Not available	71/179	39.7	39.3	31.4 – 47.0
Too expensive	4/179	2.2	1.7	0.1 – 3.1
Partner objected	12/179	6.7	7.0	3.2 – 10.8
Don't like them	16/179	8.9	8.0	4.3 – 11.2
Used other contraceptive	0/179	-	-	-
Used other prevention method	7/179	3.9	4.3	1.1 – 7.7
Regular partner	2/179	1.1	0.8	0.0 – 1.5
Condoms take away pleasure	29/179	16.2	16.2	11.1 – 21.4
Other	2/179	1.1	1.0	0.1 – 1.9

Table 123: Sexual behaviour with casual male partners, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Places where last casual partner was met</b> (multiple answers possible)				
Brothel	1/354	0.3	0.4	0.0 – 0.9
Bar/café/disco/restaurant/nightclub	13/354	3.7	3.6	1.7 – 5.4
Hotel	11/354	3.1	3.4	1.6 – 5.3
Street, park, or public transport	168/354	47.5	47.3	42.0 – 52.4
Through friends	34/354	9.6	10.3	7.2 – 13.7
Internet, chat, or SMS	28/354	7.9	8.8	5.9 – 12.2
Motel or guest house	15/354	4.2	3.9	2.2 – 5.5
School	2/354	0.6	0.6	0.0 – 1.5
Party	19/354	5.4	6.3	3.8 – 9.3
Intermediary	3/354	0.8	1.2	0.0 – 2.8
Service station	12/354	3.4	3.6	1.8 – 5.5
Truck stop / three wheeler stop	4/354	1.1	1.1	0.2 – 2.0
Massage parlour/Spa	0/354	-	-	-
Other_ Home/House	8/354	2.3	1.6	0.5 – 2.3
Public Gatherings (festivals...)	10/354	2.8	3.2	1.3 – 5.2
Beach	25/354	7.1	7.4	4.8 – 10.2
Don't know	4/354	1.1	0.8	0.1 – 1.3
Other <sup>77</sup>	2/354	0.5	-	-
<b>Last casual sexual partner's HIV status</b>				
Negative	114/310	36.8	37.2	31.7 – 42.8
Positive	10/310	3.2	3.4	1.5 – 5.4
Don't know	186/310	60.0	59.4	53.5 – 65.0

### 9.2.11 Sexual behaviour with regular male partners

Less than a quarter (17.1%) of MSM in Galle used a condom every time they had sex with male casual partners in the past six months, although it is slightly higher for last anal sex at just over a third (36.6%) (Table 124). Typically the MSM suggests condom use (88.6%). The main reasons for condom usage include to prevent HIV / STIs (83.7%), and also not trusting their partner (27.7%), while main reasons for not using a condom include lack of availability (31.1%), not thinking it was necessary (26.1%). Most common places for meeting their last regular partner follow the same patterns as for casual partners, in streets, parks or public transport (39.5%) and through friends (12.3%). Half (50.5%) of all MSM in Galle did not know the HIV status of their last regular partner.

Table 124: Sexual behaviour with regular male partners, MSM Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Condom use during last 6 months</b>				
Every time	53/299	17.7	17.1	12.8 – 21.2
Almost every time	56/299	18.7	18.0	13.5 – 22.2
Sometimes	81/299	27.1	23.7	18.3 – 27.5
Never	68/299	22.7	25.2	20.9 – 30.7
Don't know	41/299	13.7	16.0	11.5 – 21.5
<b>Used a condom at last anal sex</b>				
Yes	121/319	37.9	36.6	31.4 – 41.1

<sup>77</sup> Other: Prison (n=1), at time (n=1)

Table 124: Sexual behaviour with regular male partners, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Person who suggested to use a condom</b>				
MSM did	111/121	91.7	88.6	82.5 – 93.0
Partner did	10/121	8.3	11.4	7.0 – 17.5
<b>Reasons for using a condom</b> (multiple answers possible)				
To prevent HIV/STIs	103/121	85.1	83.7	76.4 – 90.4
Do not trust partner	33/121	27.3	27.7	19.1 – 36.3
Messages advising use of condoms	12/121	9.9	9.9	4.9 – 15.0
To prevent pregnancy	0/121	-	-	-
Don't know	3/121	2.5	4.8	0.6 – 10.1
<b>Reasons for not using a condom</b> (multiple answers possible)				
Never heard of condoms	10/198	5.1	7.5	3.6 – 12.6
Don't know how to obtain condoms	8/198	4.0	4.3	1.5 – 7.1
Didn't think it was necessary	47/198	23.7	26.1	19.7 – 33.5
Didn't think of it	17/198	8.6	9.3	4.4 – 14.5
Not available	64/198	32.3	31.1	24.0 – 37.7
Too expensive	3/198	1.5	1.2	0.0 – 2.3
Partner objected	5/198	2.5	2.6	0.5 – 4.7
Don't like them	12/198	6.1	5.6	2.7 – 8.3
Used other contraceptive	0/198	-	-	-
Used other prevention method	5/198	2.5	1.7	0.0 – 3.4
Regular partner	39/198	19.7	19.1	13.6 – 24.4
Condoms take away pleasure	32/198	16.2	16.6	11.7 – 21.6
Don't know	4/198	2.0	1.6	0.1 – 2.9
<b>Places where last regular partner was met</b> (multiple answers possible)				
Brothel	0/355	-	-	-
Bar/café/disco/restaurant/nightclub	14/355	3.9	3.7	1.9 – 5.5
Hotel	17/355	4.8	4.6	2.6 – 6.6
Street, park, or public transport	137/355	38.6	39.5	34.6 – 44.8
Through friends	41/355	11.5	12.3	9.1 – 16.0
Internet, chat, or SMS	31/355	8.7	9.0	5.9 – 12.2
Motel or guest house	35/355	9.9	11.3	7.6 – 15.6
School	5/355	1.4	1.4	0.3 – 2.5
Party	13/355	3.7	3.3	1.7 – 4.8
Intermediary	1/355	0.3	0.2	0.0 – 0.5
Service station	26/355	7.3	6.6	4.1 – 8.7
Truck stop / three wheeler stop	4/355	1.1	1.0	0.2 – 1.8
Massage parlour/Spa	0/355	-	-	-
Other: Home/house	31/355	8.7	7.9	5.4 – 10.1
Other: Public Gathering	2/355	0.6	0.3	0.0 – 0.6
Other: Beach	13/355	3.7	3.6	1.7 – 5.5
Don't know	3/355	0.8	0.7	0.0 – 1.3
Other <sup>78</sup>	4/355	1.1	-	-
<b>Last regular sexual partner's HIV status</b>				
Negative	161/330	48.8	47.7	41.5 – 53.5
Positive	6/330	1.8	2.2	0.7 – 4.0
Don't know	163/330	49.4	50.0	44.0 – 56.4

<sup>78</sup> Other: Prison (n=1), my wife (n=1), near Colombo (n=1), NGO (n=1)

## 9.2.12 Sexual behaviour with women

Of those men who have ever had sex with a woman, over three quarters have had sex with a woman in the last six months (79.1%), and of those less than half (44.5%) used a condom at last sex with a female partner (Table 125). Typically the MSM suggested condom usage (74.4%). Reasons for using condoms follow the same patterns as for casual and regular male partners, to prevent HIV and STIs (70.8%), and not trusting the partner (25.5%), while reasons for not using condoms are lack of availability (25.7%) and not thinking it is necessary (25.6%). MSM in Galle meet female partners on the street, in parks or in public transport (33.3%) and at hotels (21.1%), the latter which was not highly prevalent amongst male partners. Even fewer MSM in Galle asked the HIV status of their female partners (65.5%) than of their male partners.

**Table 125: Sexual behaviour with women, MSM Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Had sex with a female partner in the last 6 months</b>				
Yes	160/198 <sup>79</sup>	80.8	79.1	72.7 – 84.5
<b>Condom use during last 6 months</b>				
Every time	65/151	43.0	44.8	34.5 – 55.8
Almost every time	28/151	18.5	18.7	11.7 – 25.7
Sometimes	29/151	19.2	18.1	11.8 – 24.0
Never	4/151	2.6	2.7	0.5 – 4.8
Don't know	25/151	16.6	15.8	6.7 – 24.5
<b>Used a condom at last sex with a female partner</b>				
Yes	82/192	42.7	44.5	37.4 – 52.1
<b>Person who suggested to use a condom</b>				
MSM did	65/82	79.3	74.4	63.3 – 83.2
Woman did	17/82	20.7	25.6	16.8 – 36.7
<b>Reasons for using a condom</b> (multiple answers possible)				
To prevent HIV/STIs	58/82	70.7	70.8	61.3 – 80.3
Do not trust partner	22/82	26.8	25.5	15.6 – 34.8
Messages advising use of condoms	4/82	4.9	5.2	0.8 – 9.5
To prevent pregnancy	17/82	20.7	17.9	9.7 – 24.9
Don't know	5/82	6.1	7.1	0.9 – 13.6
<b>Reasons for <u>not</u> using a condom</b> (multiple answers possible)				
Never heard of condoms	3/110	2.7	4.2	0.9 – 8.4
Don't know how to obtain condoms	3/110	2.7	2.2	0.0 – 4.6
Didn't think it was necessary	31/110	28.2	25.6	17.5 – 32.5
Didn't think of it	10/110	9.1	7.8	2.6 – 12.4
Not available	26/110	23.6	25.7	16.8 – 35.6
Too expensive	1/110	0.9	0.6	0.0 – 1.3
Partner objected	4/110	3.6	3.7	0.5 – 6.8
Don't like them	4/110	3.6	3.7	0.3 – 7.1
Used other contraceptive	0/110	-	-	-
Used other prevention method	0/110	-	-	-
Regular partner	23/110	20.9	21.1	13.3 – 28.9
Condoms take away pleasure	19/110	17.3	18.5	11.2 – 26.2
Don't know	1/110	0.9	1.0	0.0 – 2.3

<sup>79</sup> Among those who had ever had sex with a woman

Table 125: Sexual behaviour with women, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Places where last female partner was met</b> (multiple answers possible)				
Brothel	6/195	3.1	2.7	0.5 – 4.7
Bar/café/disco/restaurant/club	8/195	4.1	6.5	2.5 – 11.5
Hotel	42/195	21.5	21.1	15.6 – 26.4
Street, park, or public transport	63/195	32.3	33.3	26.1 – 40.9
Through friends	18/195	9.2	7.7	3.8 – 10.9
Internet, chat, or SMS	17/195	8.7	7.3	3.9 – 10.2
Motel or guest house	10/195	5.1	4.6	1.7 – 7.2
School	0/195	-	-	-
Party	2/195	1.0	1.3	0.0 – 3.3
Intermediary	0/195	-	-	-
Service station	11/195	5.6	5.1	2.0 – 8.1
Truck stop / three wheeler stop	0/195	-	-	-
Massage parlour/Spa	0/195	-	-	-
Other: Home/house	13/195	6.7	6.7	3.2 – 10.2
Other: Beach	8/195	4.1	5.0	1.6 – 8.7
Don't know	12/195	6.2	6.8	2.8 – 11.0
Other <sup>80</sup>	3/195	1.5	-	-
<b>Last female sexual partner's HIV status</b>				
Negative	66/197	33.5	32.5	25.5 -38.9
Positive	4/197	2.0	20.6	0.0 – 4.7
Don't know	127/197	64.5	65.5	58.9 – 72.6

### 9.2.13 Condom availability and use

While most MSM in Galle have heard of condoms (91.5%) and know where to obtain one (92.5%), slightly fewer have ever used one (78.9%) (Table 126). Typical places where MSM know condoms can be obtained, and where they currently access them, include private pharmacies and chemists (86.8% and 65.5%, respectively) and through friends (18.5%, and 18.4% respectively). Less than a quarter (20.4%) of MSM in Galle have received free condoms from NGOs or health facilities, but most MSM do find condoms to be affordable and easy to obtain (68.9% and 82.1%, respectively).

Table 126: Condom availability and use, MSM Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of a male condom</b>				
Yes	333/355	93.8	91.5	87.5 – 94.2
<b>Ever used a male condom</b>				
Yes	264/333	79.3	78.9	74.7 – 82.8
<b>Knows where to obtain male condoms</b>				
Yes	309/333	92.8	92.5	89.7 – 95.2

<sup>80</sup> Others: Colombo (n=2), my wife (n=1)

Table 126: Condom availability and use, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Places where they can obtain male condoms</b> (multiple answers possible)				
Government STD clinic	18/309	5.8	7.0	3.5 – 11.2
Government non-STD clinic	3/309	1.0	0.8	0.0 – 1.5
Private clinic	5/309	1.6	1.1	0.3 – 1.9
Private pharmacy or chemist	267/309	86.4	86.8	83.2 – 90.6
Traditional healer/Herbalist	7/309	2.3	2.0	0.6 – 3.3
Neighbourhood market/Stand	8/309	2.6	3.3	1.2 – 5.9
Friends	61/309	19.7	18.5	14.0 – 22.3
Sex partner/s	6/309	1.9	1.7	0.4 – 2.8
Bar	0/309	-	-	-
Service Station/s	6/309	1.9	2.0	0.6 – 3.4
Other: NGO (Saviya project)	14/309	4.5	3.5	1.6 – 4.8
Other <sup>81</sup>	1/309	0.3	-	-
<b>Main source/s of condoms</b> (multiple answers possible)				
Government STD clinic	12/333	3.6	3.9	1.5 – 6.3
Government non-STD clinic	3/333	0.9	0.7	0.0 – 1.3
Private clinic	3/333	0.9	0.6	0.0 – 1.1
Private pharmacy or chemist	221/333	66.4	65.5	60.3 – 70.2
Traditional healer/Herbalist	5/333	1.5	1.2	0.1 – 2.1
Neighbourhood market/Stand	6/333	1.8	2.3	0.7 – 4.5
Friends	66/333	19.8	18.4	13.9 – 22.1
Sex partner/s	8/333	2.4	2.3	0.7 – 3.7
Bar	0/333	-	-	-
Service Station/s	6/333	1.8	1.8	0.6 – 3.1
Other: NGO (Saviya project)	9/333	2.7	2.5	0.9 – 4.2
Other: Never bought/used	17/333	5.1	4.3	2.3 – 5.8
Don't know	35/333	10.5	12.5	8.8 – 17.1
Other <sup>82</sup>	1/333	0.3	-	-
<b>Usually carries condoms</b>				
Yes	66/334	19.8	18.6	14.4 – 22.2
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>				
Yes	72/334	21.6	20.4	15.9 – 24.2
<b>Condom is affordable</b>				
Very affordable	158/331	47.7	48.4	43.3 – 53.7
Somewhat affordable	72/331	21.8	20.5	16.0 – 24.3
Not affordable	12/331	3.6	3.5	1.7 – 5.1
Don't know	89/331	26.9	27.6	22.9 – 32.8
<b>Condom is easy to obtain</b>				
Very easy	190/331	57.4	58.6	53.6 – 64.1
Somewhat easy	82/331	24.8	23.5	18.9 – 27.5
Not easy	10/331	3.0	4.4	1.3 – 8.0
Don't know	49/331	14.8	13.6	9.8 – 16.7

<sup>81</sup> Other: Guesthouse (n=1)<sup>82</sup> Other: Guesthouse (n=1)

### 9.2.14 Lubricant availability and use

Less than half (40.0%) of MSM in Galle have heard of lubricant, and few use it regularly (sometimes: 14.2%,; usually: 4.6%; always: 4.3%) (Table 127). Of those who use lubricant, water based (22.9%) is the most common type, followed by baby oil (18.0%). Over two thirds (40.8%) of MSM in Galle would be interested in using lubricant in the future.

**Table 127: Lubricant availability and use, MSM Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of lubricant</b>				
Yes	156/344	43.9	40.0	34.4 – 43.6
<b>Lubricant use during vaginal or anal sex</b>				
Always	8/156	5.1	4.3	1.3 – 7.0
Usually	7/156	4.5	4.6	1.3 – 7.9
Sometimes	24/156	15.4	14.2	8.5 – 19.2
Rarely	16/156	10.3	10.3	6.0 – 14.7
Never	101/156	64.7	66.6	59.8 – 74.3
<b>Type of lubricant used</b>				
Glycerine	3/55	5.5	4.8	0.3 – 8.8
Saliva/Water	4/55	7.3	7.4	1.6 – 13.6
Vaseline	3/55	5.5	4.4	0.2 – 8.0
Baby Oil	9/55	16.4	18.0	8.6 – 28.4
Lotion	10/55	18.2	17.8	8.9 – 26.5
Other Oil	4/55	7.3	6.7	1.6 – 11.6
Water-Based	10/55	18.2	22.9	12.5 – 35.8
Silicon-based	11/55	20.0	14.4	5.6 – 19.5
Soap	0/55	-	-	-
What I get from peer educator	0/55	-	-	-
Don't know	5/55	9.1	10.0	3.1 – 17.5
<b>Interested in using lubricant in the future</b>				
Yes	67/156	42.9	40.8	32.5 – 38.1
No	65/156	41.7	39.0	30.9 – 45.9
Don't know	24/156	15.4	20.2	13.4 – 29.1

### 9.2.15 Knowledge of STI symptoms in women and men

Less than half (48.9%) of MSM in Galle have heard of diseases that can be transmitted sexually and that it is possible to have an STI without any symptoms (44.4%) (Table 128). However, MSM are able to mention specific signs of STIs in women and men, most notably itching, genital discharge and genital ulcers and sores.

**Table 128: Knowledge of STI symptoms in women and men, MSM Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of diseases that can be transmitted sexually</b>				
Yes	191/355	53.8	48.9	42.3 – 53.2



Table 128: Knowledge of STI symptoms in women and men, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Knows it is possible to have an STI without symptoms</b>				
Yes	159/355	44.8	44.4	39.2 – 49.3
<b>Mentioned as a sign/symptom of STIs in women</b> (multiple answers possible)				
Abdominal pain	4/191	2.1	1.3	0.0 – 2.2
Genital discharge	53/191	27.7	27.4	20.2 – 34.3
Foul smelling discharge	6/191	3.1	3.6	1.1 – 6.4
Burning pain on urination	9/191	4.7	4.6	1.5 – 7.6
Genital ulcers or sores	41/191	21.5	22.3	16.6 – 28.5
Swelling in groin area	16/191	8.4	7.6	4.3 – 10.5
Itching	71/191	37.2	37.2	30.1 – 44.4
Don't know	73/191	38.2	39.3	32.5 – 46.6
<b>Mentioned as a sign/symptom of STIs in men</b> (multiple answers possible)				
Abdominal pain	6/191	3.1	2.2	0.4 – 3.3
Genital discharge	78/191	40.8	41.1	33.8 – 48.6
Foul smelling discharge	4/191	2.1	2.4	0.3 – 4.7
Burning pain on urination	7/191	3.7	3.6	0.9 – 6.1
Genital ulcers or sores	49/191	25.7	25.5	19.3 – 31.5
Swelling in groin area	25/191	13.1	14.7	9.5 – 20.8
Itching	88/191	46.1	46.6	39.1 – 54.5
Other: Losing weight	1/191	0.5	0.2	0.0 – 0.2
Don't know	54/191	28.3	29.8	23.0 – 37.6
<b>Places where someone from the community who has an STI can get treatment</b> (multiple answers possible)				
Ayurvedic physician	2/355	0.6	0.5	0.0 – 1.1
Pharmacy	1/355	0.3	0.3	0.0 – 0.7
Private clinic	31/355	8.7	9.3	6.4 – 12.4
Government STD clinic	83/355	23.4	21.4	16.6 – 25.1
Government clinic or hospital (non-STD)	159/355	44.8	45.8	40.5 – 51.6
Don't know	106/355	29.9	30.3	25.7 – 35.2

### 9.2.16 Patterns of STI care seeking

Few MSM in Galle had either genital discharge (2.2%) or a sore/ulcer (2.4%) in the last 12 months, however more than two thirds of those who did also went for treatment (62.8% and 67.4%, respectively) (Table 129). Treatment was typically sought at private clinics (39.7%) or private pharmacies/chemists (37.7%), and the reasons for choosing these venues included recommendation by a friend or acquaintance (48.0%) and proximity/location (30.2%). Nearly all respondents were satisfied with the treatment they received (92.8%), but less than half (43.1%) told the health provider that they have sex with men.

A 19 year old MSM in Galle reported *“If someone has a STI, they go to the STI clinic. They help a lot and do it quickly. The whole process is good”*. He has gone with a friend but did not receive treatment himself. His friend had a blood test and everyone was very friendly.

**Table 129: Patterns of STU care seeking, MSM Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Doctor confirmed STI in the last 12 months</b>				
Yes	7/191	3.7	3.2	1.1 – 5.0
<b>STI symptoms (discharge) in the last 12 months</b>				
Yes	10/355	2.8	2.2	1.0 – 3.1
<b>Sought treatment for discharge</b>				
Yes	7/10	70.0	62.8	34.5 – 86.8
<b>Reasons for not seeking treatment for discharge</b> (multiple answers possible)				
Didn't know where to go	1/3	33.3	44.1	0.0 – 98.7
Embarrassed or afraid	1/3	33.3	23.8	0.0 – 60.0
Could not afford treatment	0/3	-	-	-
Unable to get transportation	0/3	-	-	-
Didn't think I needed it	1/3	33.3	30.1	0.0 – 78.0
<b>STI symptoms (sore or ulcer) in the last 12 months</b>				
Yes	10/355	2.8	2.4	1.1 – 3.5
<b>Sought treatment for sore or ulcer</b>				
Yes	7/10	0.7	67.4	40.9 – 91.4
<b>Reasons for not seeking treatment for sore or ulcer</b> (multiple answers possible)				
Didn't know where to go	0/3	-	-	-
Embarrassed or afraid	0/3	-	-	-
Could not afford treatment	0/3	-	-	-
Unable to get transportation	0/3	-	-	-
Didn't think I needed it	3/3	100.0	100.0	-
<b>Places where STI treatment (for discharge, sore, or ulcer) was sought</b> (multiple answers possible)				
Government STD clinic	2/12	16.7	18.2	0.1 – 37.2
Government non-STD clinic	1/12	8.3	5.1	0.0 – 6.8
Private clinic	5/12	41.7	39.7	17.8 – 59.2
Private pharmacy or chemist	4/12	33.3	37.7	17.7 – 61.4
Traditional healer/Herbalist	0/12	-	-	-
Medicine or herbs from home	0/12	-	-	-
Don't know	1/12	8.3	11.7	0.0 – 30.8
<b>Reasons for choosing this/these places</b> (multiple answers possible)				
Confidentiality	3/12	25.0	23.5	5.9 – 39.1
Affordability	0/12	-	-	-
Recommendation by friend or acquaintance	6/12	50.0	48.0	24.8 – 68.6
Quality and/or specialized care given at this place	1/12	8.3	8.5	0.0 – 21.4
Knows the caregivers	0/12	-	-	-
Known friendliness of the caregivers	0/12	-	-	-
Proximity/Location	3/12	25.0	30.2	11.2 – 53.6
Don't know	1/12	8.3	11.8	0.0 – 30.4

Table 129: Patterns of STU care seeking, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Told health care provider that they have sex with men last time they received STI treatment or diagnosis</b>				
Yes	7/16	43.8	43.1	23.1 – 63.3
<b>Satisfaction with treatment from health care provider during last visit for STI treatment</b>				
Very satisfied	6/16	27.5	34.9	15.1 – 52.6
Somewhat satisfied	9/16	56.3	57.9	38.5 – 78.8
Not satisfied	1/16	6.3	7.2	0.0 – 19.5

### 9.2.17 HIV information and personal risk perception

Less than two thirds (62.1%) of MSM in Galle have heard of HIV / AIDS, with the main sources of information from school (36.4%) and health services (13.1%) (Table 130). Most MSM (69.5%) in Galle have never discussed HIV/AIDS with any sexual partner, but among those who have, some or all of their partner/s shared their HIV status with them (some of them: 76.5%; all of them 13.1%). More than three quarters (47.5%) of respondents believe they are at some risk of HIV, the primary reasons being many sexual partners (45.5%) and not always using condoms (42.6%). The one HIV positive MSM in Galle perceived his HIV status to be positive (data not shown). Of the nine MSM in Galle who perceived themselves to be at high risk, only one used a condom at last sex (data not shown).

An MSM from Galle, 19 years old said: *“I knew about condoms, but how far it would persist, I did not know. I participate in a meeting once a month where we discuss HIV and condoms, but we discuss it as a routine thing, and then the importance gets lost.”*

Table 130: HIV information and personal risk perception, MSM Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of HIV/AIDS</b>				
Yes	226/354	63.8	62.1	56.8 – 66.6
<b>Main source of the most thorough information about HIV/AIDS</b>				
School	84/226	37.2	36.4	29.3 – 43.1
Health services	28/226	12.4	13.1	8.6 – 18.0
Workplace	13/226	5.8	4.7	2.1 – 6.8
Friends/Family	30/226	13.3	12.9	8.1 – 17.4
Television	8/226	3.5	3.8	1.5 – 6.2
Newspaper/Magazines	22/226	9.7	9.6	5.8 – 13.2
Posters/Billboards	9/226	4.0	4.8	1.9 – 8.0
Pamphlets/Leaflets	7/226	3.1	4.2	1.6 – 7.4
Radio	0/226	-	-	-
NGOs	21/226	9.3	9.0	5.0 – 12.9
Other	4/226 <sup>83</sup>	1.8	1.5	2.0 – 2.7
<b>Discussed HIV/AIDS with any sexual partner</b>				
Yes, all				
Yes, some	15/225	6.7	5.7	2.5 – 8.5
No, none	60/225	26.7	24.7	18.6 – 29.8
	150/225	66.7	69.5	64.0 – 76.6

Table 130: HIV information and personal risk perception, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Sexual partner/s told them participant their HIV status</b>				
Yes, all	11/75	14.7	13.1	3.8 – 21.1
Yes, some	57/75	76.0	76.5	65.7 – 87.9
No, none	7/75	9.3	10.4	3.2 – 18.2
<b>Knows somebody who is HIV-positive or has died of AIDS</b>				
Yes	29/226	12.8	10.9	6.6 – 14.2
<b>Close friend or relative died of HIV/AIDS</b>				
Yes	4/226	1.8	2.9	0.5 – 5.8
<b>Perception of personal HIV risk</b>				
No risk	109/355	30.7	31.2	26.5 – 36.0
Small risk	136/355	38.3	37.4	32.4 – 41.9
Moderate risk	31/355	8.7	7.9	5.3 – 10.0
High risk	9/355	2.5	2.2	0.9 – 3.3
Don't know	70/355	19.7	21.4	17.4 – 26.4
<b>Reasons for believing they are at risk of contracting HIV</b> (among those who said they were at risk)				
Many sexual partners	80/176	45.5	45.5	38.0 – 53.2
Didn't always use condoms	74/176	42.0	42.6	35.9 – 49.7
Injected drugs	0/176	0.0	-	-
Partner has other partners	15/176	8.5	9.3	4.5 – 14.6
Other <sup>84</sup>	3/176	1.7	1.1	0.0 – 1.9
Don't know	4/176	2.3	1.3	0.1 – 2.1
<b>Reasons for believing they are not at risk of contracting HIV</b> (among those who said they were not at risk) (multiple answers possible)				
Trust my partner/s	61/109	56.0	54.4	44.5 – 63.8
Always use condoms	41/109	37.6	35.8	25.8 – 44.9
Don't know	13/109	11.9	14.7	7.2 – 23.5

### 9.2.18 Knowledge of HIV and AIDS

Knowledge of HIV and AIDS amongst MSM in Galle is low, with individual knowledge indicators ranging between 51.1% and 64.8%, and composite knowledge at only 14.7% (Table 131). Just over a quarter (26.3%) of MSM in Galle have heard of ART.

<sup>83</sup> Other: Dematagoda army camp (n=2) my work place (n=1), Ragama hospital (n=1)

<sup>84</sup> Other: Sex with men (n=1), sex with boys (n=1), sometimes

**Table 131: Knowledge of HIV and AIDS, MSM Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners</b> Yes	235/355	66.2	63.1	57.5 – 67.2
<b>Person can reduce the risk of getting HIV by using a condom every time he/she has sex</b> Yes	237/354	66.9	64.8	59.4 – 68.9
<b>Healthy-looking person can have HIV</b> Yes	212/354	59.9	57.1	51.3 – 61.6
<b>Person can get HIV from mosquito bites</b> No	182/355	51.3	51.1	45.5 – 56.5
<b>Person can get HIV by sharing food with someone who is infected</b> No	188/353	53.3	53.8	48.6 – 59.2
<b>Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission</b> Yes	58/352	16.4	14.7	10.5 – 18.0
<b>GARPR Knowledge Composite Indicator without GARPR (mosquito question)</b> Yes	83/352	23.6	22.2	17.4 – 26.1
<b>HIV can be transmitted from mother to her unborn child</b> Yes No Don't know	211/354 42/354 101/354	59.6 11.9 28.5	58.6 12.8 28.6	53.1 – 63.5 9.5 – 16.4 24.1 – 33.3
<b>Ever heard of ART</b> Yes	95/354	26.8	26.3	21.9 – 30.4

### 9.2.19 Stigma related to HIV and AIDS

Stigma indicators amongst MSM in Galle vary, given that over three quarters (80.9%) agree they would be willing to care for a family member at home who is HIV positive; however, more than three quarters (77.1%) would keep their family member's status a secret (Table 132). Furthermore, less than half (47.1%) believe an HIV positive student should be allowed to go to school and similarly less than a third (32.7%) would agree to buy food from a food seller who is HIV positive.

**Table 132: Stigma related to HIV and AIDS, MSM Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Agrees to take care of an HIV positive family member at home</b> Yes	289/354	81.6	80.9	76.9 – 84.5
<b>Agrees that an HIV positive student should be allowed to continue attending a school</b> Yes	173/354	48.9	47.1	41.7 – 51.6
<b>Agrees to buy food from an HIV positive food seller</b> Yes	116/353	32.9	32.7	27.8 – 37.5
<b>Thinks that, if a family member becomes HIV positive, his/her HIV status should remain confidential</b> Yes	274/351	78.1	77.1	72.6 – 81.0

### 9.2.20 HIV testing

Just over a third (33.5%) of MSM in Galle know where to go for HIV testing; however less than ten percent (9.7%) have ever been for testing, and even fewer have been for testing in the last 12 months and received their result (5.2%) (Table 133). The primary reason for never getting an HIV test is not knowing where to go (49.8%) and believing they are not risk for HIV (26.7%). Among those who tested for HIV, most respondents went to a Government STD clinic (86.8%) or a private clinic (10.8%) for their last test, and most were satisfied or very satisfied with the quality of the services (82.0%), and most (85.4%) told the provider they have sex with men. Of the ten respondents (2.2%) who thought their HIV status was positive, none were in fact positive, in fact there was only one positive MSM in the entire sample, and he believed he was negative.

**Table 133: HIV testing, MSM Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Knows where HIV testing can be obtained</b> Yes	126/355	35.5	33.5	27.9 – 38.2
<b>Ever tested for HIV</b> Yes	37/355	10.4	9.7	6.0 – 13.0
<b>The test was voluntary</b> Yes	35/37	94.6	95.1	89.5 – 100.0
<b>Site where last testing for HIV took place</b>				
Government STD Clinic	33/37	89.2	86.8	75.1 – 97.4
Government non-STD Clinic	0/37	-	-	-
Private Clinic	3/37	8.1	10.8	9.8 – 22.1
Private Pharmacy or Chemist	1/37	2.7	2.4	0.0 – 5.1
Traditional healer/herbalist	0/37	-	-	-
Medicine or herbs from home	0/37	-	-	-

Table 133: HIV testing, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for never getting an HIV test</b> (multiple answers possible)				
Don't know where to go	158/318	49.7	49.8	44.1 – 55.4
Always use condoms	9/318	2.8	3.2	0.6 – 6.0
Not at risk of getting HIV	81/318	25.5	26.7	21.9 – 32.0
Didn't have time/Too busy	41/318	12.9	13.0	8.7 – 17.3
I trust my partner	10/318	3.1	2.6	1.0 – 3.8
Afraid of knowing I may be HIV positive	16/318	5.0	4.7	2.5 – 6.7
Lack of confidentiality				
Inconvenient testing location	15/318	4.7	4.0	2.2 – 5.6
No money	21/318	6.6	6.8	4.2 – 9.4
Don't know	1/318	0.3	0.2	0.0 – 0.4
Other <sup>85</sup>	9/318	2.8	2.4	1.0 – 3.6
<b>Time since last HIV test</b>				
≤ 1 year	25/37	67.6	64.3	42.5 – 84.2
> 1 year	11/37	29.7	33.1	13.2 – 54.9
Don't know	1/37	2.7	2.6	1.7 – 3.5
<b>Knows result of last HIV test</b>				
Yes	29/37	78.4	83.1	76.0 – 93.2
<b>Tested for HIV in the past 12 months and knows result</b>				
Yes	20/355	5.6	5.2	2.6 – 7.6
<b>Reasons for the last HIV test</b> (multiple answers possible)				
Wanted to know my HIV status	32/37	86.5	88.3	81.6 – 95.9
My partner asked me to get tested	0/37	-	-	-
Wanted to start sexual relations with a new partner	0/37	-	-	-
Wanted to get married	0/37	-	-	-
Need for loan/insurance coverage	0/37	-	-	-
Employer requested the test	0/37	-	-	-
Felt sick	1/37	2.7	3.1	0.0 – 7.2
Advised by health worker	2/37	5.4	4.8	0.0 – 10.1
Advised by peer educator	2/37	5.4	3.9	0.0 – 7.2
<b>Result of last HIV test</b>				
HIV-negative	28/37	75.7	83.1	75.5 – 93.6
HIV-positive	0/37	-	-	-
Indeterminate	0/37	-	-	-
Did not get the result	9/37	24.3	16.9	6.4 – 24.5
<b>Reason for not getting last HIV test result</b>				
Didn't have time/Too busy	2/8	25.0	23.0	0.0 – 44.8
Not infected	0/8	-	-	-
Too scared	0/8	-	-	-
Testing centre didn't have result	6/8	75.0	77.0	55.2 – 100.0
Don't know	0/8	-	-	-
Other	0/8	-	-	-

<sup>85</sup> Other: Don't think it was necessary (n=1), don't think about it (n=2), lack of awareness (n=1), nothing special (n=1)

Table 133: HIV testing, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Perception of current HIV status</b>				
HIV-negative	215/355	60.6	62.2	57.6 – 67.7
HIV-positive	10/355	2.8	2.2	0.9 – 3.2
Don't know	130/355	36.6	35.6	30.3 – 40.3
<b>Satisfaction with quality of services provided during last HIV testing</b>				
Very satisfied	6/37	16.2	12.6	2.9 – 20.1
Satisfied	26/37	70.3	69.4	54.3 – 84.2
A little satisfied	4/37	10.8	15.4	4.2 – 29.0
Not satisfied	1/37	2.7	2.6	0.0 – 6.4
<b>Told health care provider or counsellor that they have sex with men at last HIV testing</b>				
Yes	31/37	83.8	85.4	77.1 – 94.3
<b>Reasons for not telling health care provider or counsellor they have sex with men (multiple answers possible)</b>				
Afraid of discrimination/Not providing testing				
Afraid provider would tell police/legal authorities	1/6	16.7	20.1	0.0 – 51.9
It was not necessary to discuss	0/6	-	-	-
Afraid provider would not keep information confidential	2/6	33.3	28.4	0.0 – 52.0
Little or no contact/interaction with counsellor/provider Shy/Embarrassed	0/6	-	-	-
Provider already knew	2/6	33.3	35.5	5.1 – 68.0
Don't know	2/6	33.3	33.1	3.4 – 64.4
	0/6	-	-	-
	0/6	-	-	-
<b>Felt that health care provider or counsellor reacted in a negative or discriminatory way because they have sex with men</b>				
Yes	1/30	3.3	3.1	0.0 – 7.8
<b>Health care provider or counsellor's behaviour</b>				
(multiple answers possible)				
It was uncomfortable	1/1	100	-	-
Stopped talking to me	0/1	-	-	-
Asked me to leave	0/1	-	-	-
Verbally abused or scolded me	0/1	-	-	-

### 9.2.21 Experience of stigma, discrimination and violence

Only a handful reporting being refused healthcare (1.4%) or police assistance (3.3%), or being physically abused (3.7%) because they believed they have sex with men; however more MSM in Galle did report cases of insults (16.0%) (Error! Not a valid bookmark self-reference.). Less than two percent (1.9%) of MSM were sexually abused, and among those who did, the most common perpetrator was an unknown person (67.3). None sought medical treatment or reported it to the police.



**Table 134: Experience of stigma, discrimination and violence, MSM Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Has been refused health care because someone believed they had sex with men</b> Yes	4/355	1.1	1.4	0.2 – 2.7
<b>Has been refused police assistance because someone believed they had sex with men</b> Yes	12/355	3.4	3.3	1.5 – 5.2
<b>Has been verbally insulted because someone believed they had sex with men</b> Yes	53/355	14.9	16.0	12.2 – 20.4
<b>Has been hit, kicked, or beaten because someone believed they had sex with men</b> Yes	15/355	4.2	3.7	17.4 – 5.4
<b>Has been sexually assaulted or raped</b> Yes	8/355	2.3	1.9	0.7 – 2.8
<b>Type of abuser last time they were sexually assaulted or raped</b>				
Unknown person	5/8	62.5	67.3	43.3 – 94.1
Social acquaintance	1/8	12.5	7.5	0.0 – 12.0
Family member/Relative	0/8	-	-	-
Police	0/8	-	-	-
Client	1/8	12.5	13.4	0.0 – 34.8
Paying partner	0/8	-	-	-
Non-paying partner or boyfriend	0/8	-	-	-
Don't know	1/8	12.5	11.8	0.0 – 27.7
<b>Sought medical treatment after sexual assault/rape</b> Yes	0/8	-	-	-
<b>Reported sexual assault/rape to the police</b> Yes	0/8	-	-	-

### 9.2.22 Health care utilization

Less than half of MSM in Galle have sought healthcare for any reason in the last 12 months, of those who did, they had minimal difficulty obtaining care (1.4%) Table135.

**Table 135: Health care utilization, MSM Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Sought medical care for any reason during last 12 months</b>				
Yes	156/355	43.9	44.0	38.9 – 48.9
<b>Had difficulty getting medical care during last 12 months</b>				
Yes	2/156	1.3	1.4	0.0 – 3.0
<b>Type of difficulty</b> (multiple answers possible)				
Too expensive	0/2	-	-	-
Too far away	0/2	-	-	-
Could not take time from work	0/2	-	-	-
Long waiting times	2/2	100	100	-

### 9.2.23 Programme coverage

Few (8.4%) MSM in Galle have had contact with a peer educator in the last six months, of those who did they mostly received general information about HIV and STIs and condoms (Table 136). Only one tenth (10.1%) of MSM in Galle meet the requirement for the GARPR prevention programmes indicator (received free condoms and know where to get an HIV test).

**Table 136: Programme coverage, MSM Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Contact with a health peer educator in the community in the last 6 months</b>				
Yes	34/355	9.6	8.4	5.4 – 10.8
<b>Number of times of contact with a health peer educator in the last 6 months</b>				
1	9/34	26.5	24.1	13.3 – 33.5
2	8/34	23.5	26.7	18.3 – 36.7
≥ 3	13/34	38.2	34.5	15.5 – 51.2
Don't know	4/34	11.8	14.7	0.0 – 36.1
<b>Services or information received from the health peer educator</b>				
General HIV/STI prevention/transmission information	31/34	91.2	90.5	82.2 – 98.4
Condoms	16/34	47.1	47.0	31.9 – 62.0
Referral for STI treatment	0/34	-	-	-
Referral for VCT	0/34	-	-	-
Medical visit	1/34	2.9	3.6	0.0 – 8.8
<b>Reached with HIV prevention programs</b> (received free condoms in the last 12 months and know where HIV testing can be obtained)				
Yes	41/355	11.5	10.1	6.4 – 13.0

### 9.2.24 Alcohol and drug use

More than three quarters (73.9%) of MSM in Galle have tried alcohol, but more than half (53.7%) have not drunk in the last four weeks (Table 137). Only one MSM in Galle has injected drugs in the last 12 months, and this person shared a needle/syringe. Of all drug usage, a handful of MSM in Galle have tried heroin (4.1%), cocaine (1.4%), ecstasy (0.4%), amphetamines (2.7%), opium (0.1%), and hashish (1.0%). The most common drug used is cannabis, with most frequent usage being four or more times a week, but still only amongst less than twenty percent of all MSM in Galle.

**Table 137: Alcohol and drug use, MSM Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever consumed alcohol</b>				
Yes	264/355	74.4	73.9	69.0 – 78.6
<b>Alcohol consumption in the last 4 weeks</b>				
Never drink alcohol	0/264	-	-	-
Never in the last 4 weeks	138/264	52.3	53.7	48.0 – 60.1
Once a week	62/264	23.5	21.9	16.9 – 26.2
Less than once a week	36/264	13.6	13.0	9.2 – 16.5
Every day	28/264	10.6	11.4	7.4 – 15.7
<b>Injected drugs in the last 12 months</b>				
Yes	1/354	0.3	0.1	0.0 – 2.5
<b>Frequency of injecting drugs in the last 12 months</b>				
Once a month or less	1/1	100	100	-
2-4 times a month	0/1	-	-	-
2-3 times a week	0/1	-	-	-
≥ 4 times a week	0/1	-	-	-
Don't know	0/1	-	-	-
<b>Type of drug injected most often</b>				
Heroin	0/1	-	-	-
Meth	0/1	-	-	-
Speedball (heroin + cocaine)	0/1	-	-	-
Don't know	1/1	100	100	-
<b>Shared needles/syringes</b>				
Yes	1/1	100	100	-
<b>Heroin</b>				
Didn't use it in the last 6 months	3/348	0.9	1.3	0.0 – 2.8
Once a month or less	3/348	0.9	0.8	0.0 – 1.4
Several times a month	1/348	0.3	0.2	0.0 – 0.3
2-4 times a month	1/348	0.3	0.1	0.0 – 0.2
2-3 times a week	2/348	0.6	0.6	0.0 – 1.2
≥ 4 times a week	4/348	1.1	1.1	0.1 – 2.1
Have never used	333/348	95.7	95.5	93.3 – 97.5
Don't know	1/348	0.3	0.5	0.0 – 1.2

Table 137: Alcohol and drug use, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Canabis</b>				
Didn't use it in the last 6 months	5/348	1.4	1.1	0.4 – 1.7
Once a month or less	7/348	2.0	1.6	0.6 – 2.4
Several times a month	6/348	1.7	1.9	0.6 – 3.3
2-4 times a month	9/348	2.6	3.2	0.8 – 5.7
2-3 times a week	14/348	4.0	3.1	1.5 – 4.2
≥ 4 times a week	28/348	8.0	7.6	4.5 – 10.6
Have never used	278/348	89.9	81.1	77.2 – 85.8
Don't know	1/348	0.3	0.4	0.0 – 1.0
<b>Cocaine</b>				
Didn't use it in the last 6 months	2/349	0.6	0.5	0.0 – 1.0
Once a month or less	0/349	-	-	-
Several times a month	2/349	0.6	0.4	0.0 – 0.9
2-4 times a month	0/349	-	-	-
2-3 times a week	1/349	0.3	0.3	0.0 – 0.7
≥ 4 times a week	1/349	0.3	0.2	0.0 – 0.4
Have never used	340/349	97.4	97.8	96.7 – 99.0
Don't know	3/349	0.9	0.8	0.0 – 1.6
<b>Ecstasy</b>				
Didn't use it in the last 6 months	1/348	0.3	0.3	0.0 – 0.6
Once a month or less	0/348	-	-	-
Several times a month	0/348	-	-	-
2-4 times a month	0/348	-	-	-
2-3 times a week	1/348	0.3	0.1	0.0 – 1.9
≥ 4 times a week	0/348	-	-	-
Have never used	342/348	98.3	98.8	98.1 – 99.6
Don't know	4/348	1.1	0.9	0.1 – 1.4
<b>Amphetamines</b>				
Didn't use it in the last 6 months	1/348	0.3	2.6	0.0 – 6.1
Once a month or less	0/348	-	-	-
Several times a month	1/348	0.3	0.1	0.0 – 0.2
2-4 times a month	0/348	-	-	-
2-3 times a week	0/348	-	-	-
≥ 4 times a week	0/348	-	-	-
Have never used	342/348	98.3	98.8	98.1 – 100
Don't know	4/348	1.1	0.8	1.1 – 1.4
<b>Opium</b>				
Didn't use it in the last 6 months	0/348	-	-	-
Once a month or less	0/348	-	-	-
Several times a month	1/348	0.3	0.1	0.0 – 0.2
2-4 times a month	0/348	-	-	-
2-3 times a week	0/348	-	-	-
≥ 4 times a week	0/348	-	-	-
Have never used	342/348	98.3	98.4	97.0 – 99.7
Don't know	5/348	1.4	1.5	0.2 – 2.9

Table 137: Alcohol and drug use, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Hashish</b>				
Didn't use it in the last 6 months	0/348	-	-	-
Once a month or less	0/348	-	-	-
Several times a month	1/348	0.3	0.3	0.0 – 6.7
2-4 times a month	3/348	0.9	0.7	0.0 – 1.3
2-3 times a week	0/348	-	-	-
≥ 4 times a week	0/348	-	-	-
Have never used	340/348	97.4	97.3	95.5 – 99.1
Don't know	4/348	1.4	1.7	0.2 – 3.4

### 9.2.25 Media usage

Two thirds of MSM in Galle listen to the radio (66.6%) and more than three quarters (92.0%) watch TV, at least once a week (Table 138). Newspaper and internet consumption are slightly lower (43.5% and 52.6% of respondents read the newspaper and surf the internet at least once a week). Most MSM in Galle do not use the internet to find sexual partners, (85.0%). Nearly all (92.9%) MSM have a mobile phone, use it to communicate with other MSM (87.2%) and would be interested in receiving health and HIV text messages (85.0%) and attending learning activities (91.1%).

Table 138: Media usage, MSM Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Radio</b>				
Never	98/354	27.7	28.5	24.4 – 33.0
Once a month	21/354	5.9	4.9	3.0 – 6.4
Once a week	15/354	4.2	4.4	2.4 – 6.5
Most days	139/354	39.3	38.6	33.6 – 43.2
Every day	81/354	22.9	23.6	19.7 – 27.8
<b>TV</b>				
Never	24/354	6.8	7.6	5.1 – 10.6
Once a month	1/354	0.3	0.4	0.0 – 0.9
Once a week	17/354	4.8	4.5	2.3 – 6.5
Most days	157/354	44.2	46.6	42.0 – 52.5
Every day	156/354	43.9	40.9	35.0 – 45.3
<b>Newspaper</b>				
Never	166/354	46.8	50.3	46.0 – 56.4
Once a month	23/354	6.5	6.2	3.8 – 8.3
Once a week	81/354	22.8	21.9	17.7 – 25.7
Most days	63/354	17.7	16.4	12.4 – 19.6
Every day	22/354	6.2	5.2	3.3 – 6.7
<b>Internet</b>				
Never	155/354	43.7	45.7	41.2 – 51.3
Once a month	7/354	2.0	1.7	0.6 – 2.7
Once a week	22/354	6.2	5.8	3.6 – 7.7
Most days	105/354	29.6	29.5	24.8 – 34.1
Every day	66/354	18.6	17.3	13.3 – 20.6

Table 138: Media usage, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Frequency of using the Internet to find sexual partners</b>				
Never	298/354	84.2	85.0	81.3 – 89.0
Once a month	9/354	2.5	2.2	1.0 – 3.3
Once a week	2/354	0.6	0.6	0.0 – 1.5
Most days	38/354	10.7	10.3	6.9 – 13.4
Every day	7/354	2.0	1.9	0.7 – 3.1
<b>Has a mobile phone</b>				
Yes	334/355	94.1	92.9	89.4 – 95.8
<b>Uses mobile phone to communicate with other MSM</b>				
Yes	293/334	87.7	87.2	83.2 – 91.0
<b>Interested in receiving HIV and health-related text messages</b>				
Yes	281/334	84.1	85.0	81.8 – 88.7
<b>Interested in attending learning activities</b>				
Yes	328/355	92.4	91.1	87.8 – 93.7

### 9.2.26 Network size and multiplier questions

The average estimate of MSM in Galle is 1,226.6 of whom 1,118.9 are above the age of 18 (Table 139). Furthermore, less than ten percent (7.7% have been treated at a Government STD clinic in 2014; the data presented in this table would ideally have used by the NSACP programme to undertake multiplier method for PSE, by cross referencing existing STD clinic routine data; however data on catchment area was not available from the STD clinic data, and therefore multiplier method calculations could not be undertaken.

Table 139: Network size and multiplier questions, MSM Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Estimation of the number of MSM who live in Galle</b>	331/355			
Mean	1320.5	-	1226.6	-
SD	617.7	-	578.7	-
Median	1200.0	-	1000	-
Range	20-4000	-	-	-
<b>Estimation of the number of MSM older than 18 who live in Galle</b>				
Mean	316/355			
SD	1204.9	-	1118.9	-
Median	554.7	-	526.3	-
Range	1100	-	1000	-
	50-3200	-	-	-

Table 139: Network size and multiplier questions, MSM Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of MSM older than 18 seen in the last month</b> (network size question)	355/355	-	-	-
Mean	7.5	-	5.7	-
SD	5.5	-	4.1	-
Median	6.0	-	5.0	-
Range	1-40	-	-	-
<b>Treated at Government STD (NSACP) clinic in 2014</b>				
Yes	22/355	6.2	5.4	2.8 – 7.7
<b>NSCAP clinics visited in 2014<sup>86</sup></b>				
Mahamodara STD clinic	17/355	4.8	4.4	2.2 – 6.4
Balapitiya STD clinic	4/355	1.1	0.8	0.1 – 1.3
Ragama STD clinic	1/355	0.3	0.3	0.0 – 0.6

### 9.3 Anuradhapura

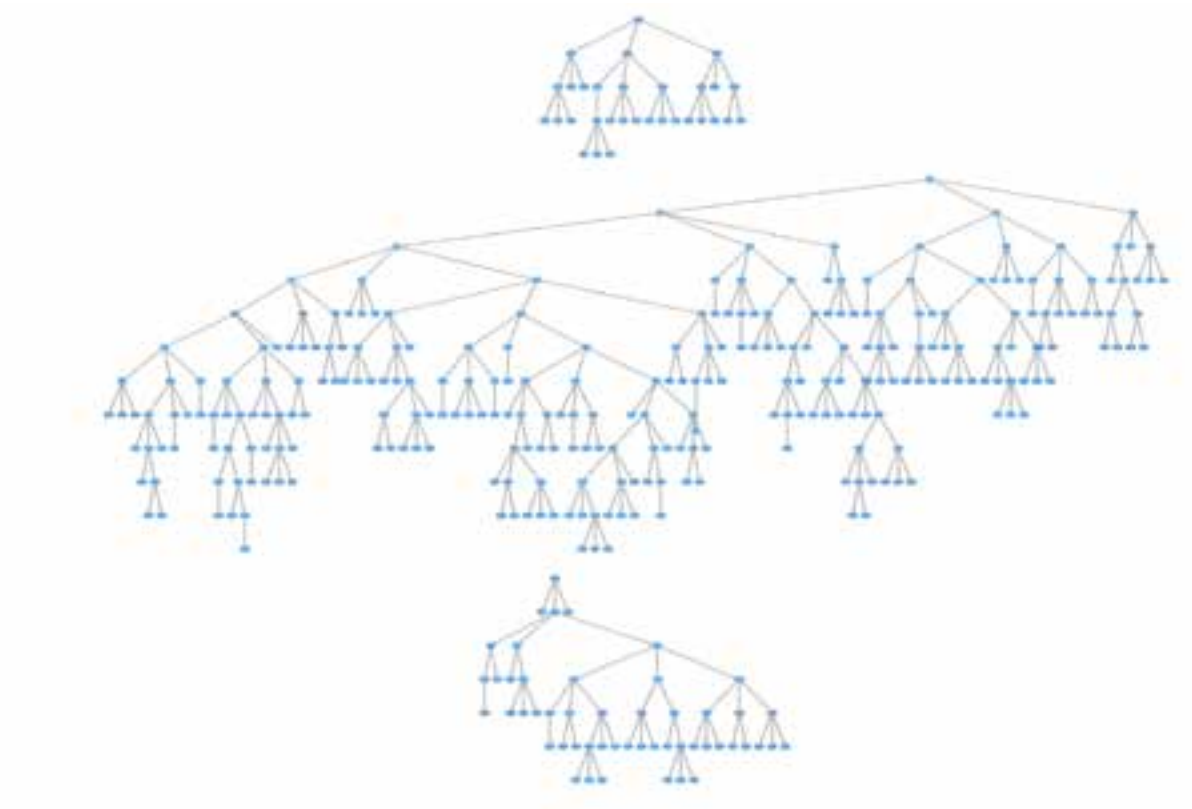
A total of 358 MSM were enrolled in Anuradhapura, including three seeds. The RDS-A estimator Gile's SS was utilized, with a population size estimate of 907 (low estimate of 358, and a high estimate of 1,456), 0.95 confidence interval and 5,000 bootstraps. Seeds included one from each sub-population of MSM - one nachchi, one MSW, and one other MSM, according to the definitions described earlier.

#### 9.3.1 Network properties

The recruitment tree presented in Figure 18 shows three seeds with recruitment chains reaching a 9<sup>th</sup> wave. Two participants reported network sizes of 50 and 100 MSM, respectively. Their network sizes were lowered to 30, the 99<sup>th</sup> percentile value. Furthermore, 12 participants did not report a network size, and were imputed with the median value of 6. The strength of association between NET and NSF was strong,  $r = 0.61$  ( $p < 0.001$ ).

<sup>86</sup> 30 of 30 (100%) who said that were treated in the Government STD clinic provided name of the clinic, month and year, 8 of those 30 tested before 2014, leaving 22 in total.

**Figure 18: Recruitment tree, MSM Anuradhapura**



**9.3.3 Bottleneck plots**

Convergence has been reached on nearly all key indicators (Figure 19), with the exception of the composite variable for GARPR on knowledge where there is a potential sign of borderline convergence. On further inspection this is caused by the question about mosquitos (Figure 20). The converging line is very close to the population estimate, so there are no cautions for the data interpretation.



Figure 19: Convergence on key variables, MSM Anuradhapura

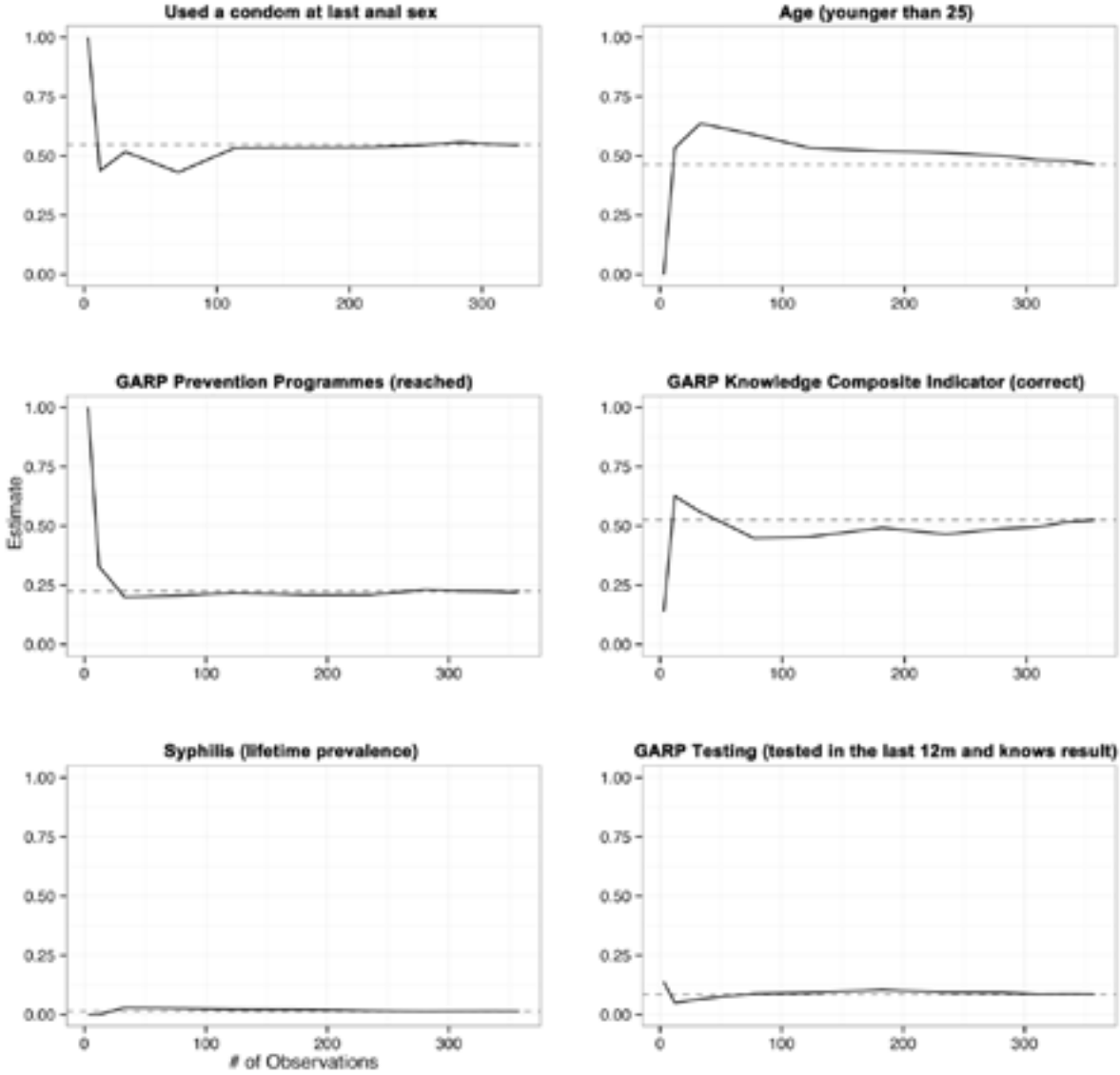
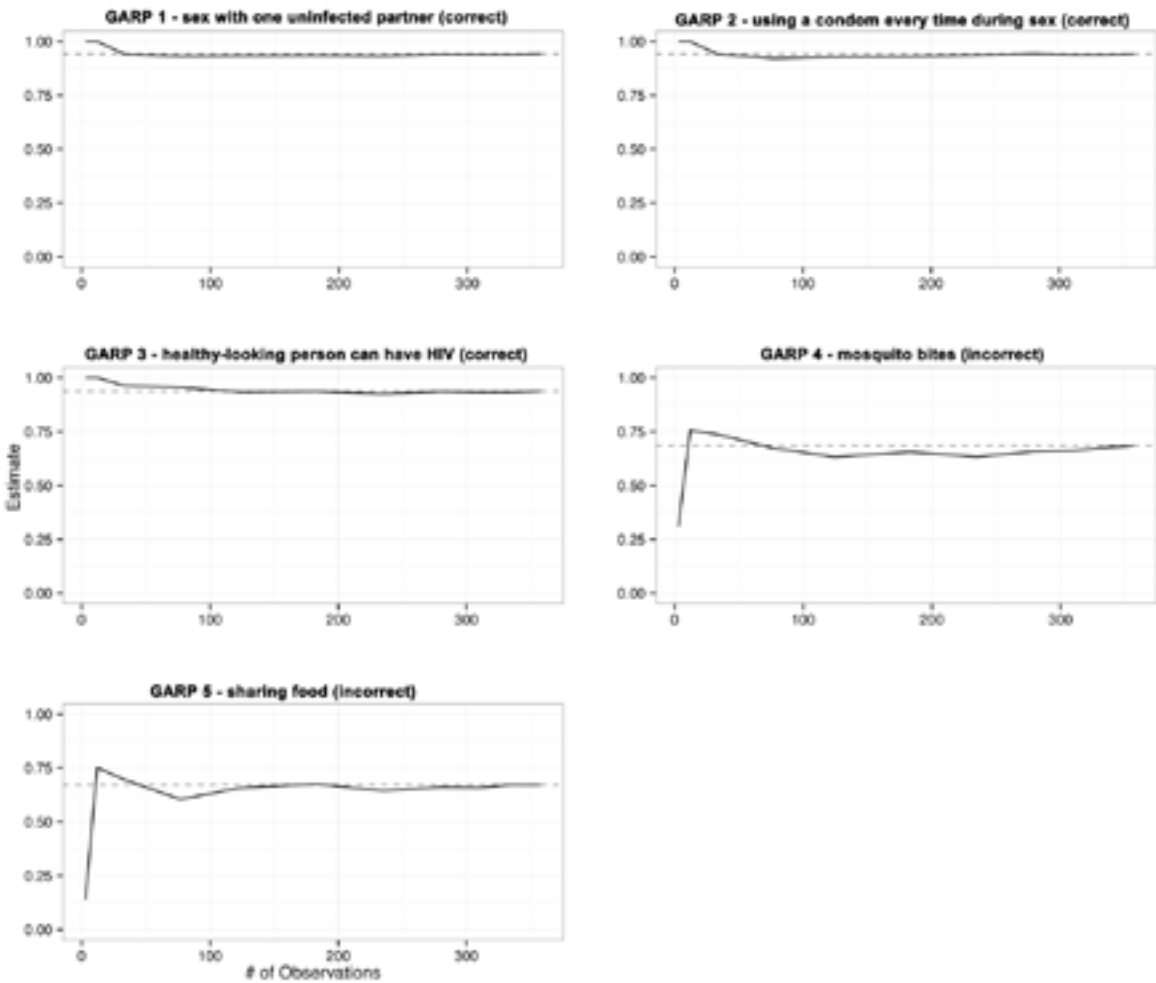


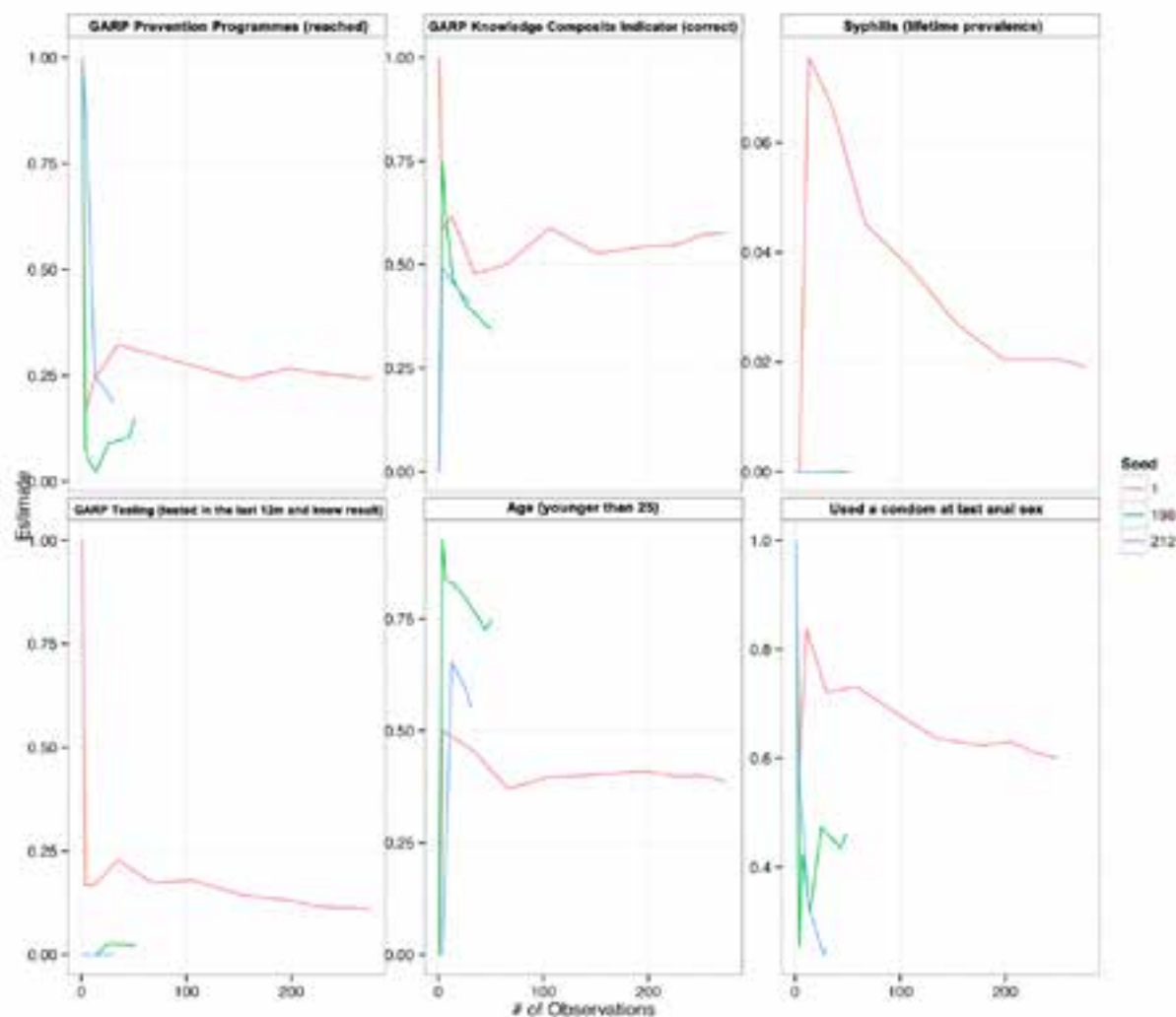
Figure 20: Convergence, GARPR Indicator individual variables, MSM Anuradhapura



### 9.3.3 Bottleneck plots

As most recruitment is coming from a single seed, the bottleneck plots are not meaningful (Figure 21).

**Figure 21: Bottleneck plots, MSM Anuradhapura**



### 9.3.4 Homophily

Homophily for key variables amongst MSM in Anuradhapura ranges between 0.87 and 1.37, which is reasonable (Table 140).

**Table 140: Homophily, MSM Anuradhapura**

Indicator	Recruitment homophily	Estimated population homophily
HIV	-	-
Active syphilis	-	-
Condom use at last anal sex	0.93	0.87

Table 140: Homophily, MSM Anuradhapura (Continued)

Indicator	Recruitment homophily	Estimated population homophily
Received free condoms from NGOs or a health care centre in the last 12 months and knows where to obtain an HIV test	1.05	1.16
Correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	1.11*	1.10
Tested for HIV in the past 12 months and knows result	1.04	1.37

### 9.3.5 Study and recruiter information

The primary reason to participate in the survey amongst MSM in Anuradhapura was interest in HIV and sexual health and for the HIV test (Table 141). All respondents received their coupons through friends or acquaintances, satisfying the parameters of RDS recruitment. The screener was also confident that all respondents were genuine members of the target group (MSM).

Table 141: Study and recruiter information, MSM Anuradhapura

Characteristic	Sample proportions	
	n/N	%
<b>Main reason for participation in the study</b>		
Interest in HIV and sexual health	222/358	62.0
HIV test	105/358	29.3
Interest in issues related to MSM	27/358	7.5
Helping the community	0/358	-
Friend wanted me to participate	4/358	1.1
Someone forced me	0/358	-
Incentive/Gift	0/358	-
<b>Mode of receiving the coupon*</b>		
From a friend/acquaintance	354/354 <sup>87</sup>	100
Found it	0/354	-
Bought it/Exchanged it for something	0/354	-
<b>Length of time they knew the person who gave them the coupon</b>		
< 6 months	11/354	3.1
6 months – 1 year	5/354	1.4
> 1 year	339/354	95.8
<b>Screener's confidence that participant is MSM</b>		
Confident	358/358	100
Somewhat confident	0/358	-
Not confident	0/358	-
<b>Screener's confidence that participant is MSM</b>		
Confident	358/358	100
Somewhat confident	0/358	-
Not confident	0/358	-

<sup>87</sup> Missing data for one person, seeds not included as these coupons were purposefully distributed by the IBBS survey team

### 9.3.6 Biological test results

There were no cases of HIV or active syphilis amongst MSM in Anuradhapura, although the prevalence of non-active syphilis is 1.4% (Table 142).

**Table 142: Biological test results, MSM Anuradhapura**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>HIV</b>	0/358	-	-	-
<b>Syphilis – Active</b>	0/358	-	-	-
<b>Syphilis – Non-Active</b>	6/358	1.7	1.4	0.5 – 2.1
<b>Syphilis – Total (active and non-active)</b>	6/358	1.7	1.4	0.5 – 2.1

### 9.3.7 Socio-demographic characteristics

The average age of MSM in Anuradhapura is 29.7 years. All MSM are male by birth, born in Sri Lanka, and nearly all are Sinhalese (97.8%) (Table 143). Most respondents (95.3% have Anuradhapura as their primary residence, and have lived in Anuradhapura for over a year (99.3%). MSM in Anuradhapura are predominantly literate (96.7%) with up to O/L level education (77.2%). Only one respondent is still a student, enrolled in a technical college. The average personal income is between 10,000 and 40,000 rupees/month (70.3%), with nearly all respondents (94.1%) supporting other dependents with this income, on average 2.7 persons. The most common occupation is street vendor / casual labourer (23.2%), followed by Government worker (20.8%).

**Table 143: Socio-demographic characteristics, MSM Anuradhapura**

Characteristic	Sample proportions		Population estimates		
	n/N	%	%	95% CI	
<b>Age</b>	Mean	30.0	-	29.7	-
	SD	11.1	-	11.3	-
	Median	27.0	-	26.0	-
	Range	18-65	-	-	-
<b>Age groups</b>	Aged under 20	59/356	16.6	17.1	13.9 – 20.3
	Aged under 25	159/356	44.7	46.3	41.2 – 51.3
	18 – 24	159/356	44.7	46.3	41.8 – 51.9
	25 – 34	91/356	25.6	24.3	19.9 – 27.8
	35 – 44	61/356	17.1	16.9	13.2 – 20.3
	≥ 45	45/356	12.6	12.5	9.4 – 15.6
<b>Sex</b>	Male	358/358	100	100	-
<b>Sex same as at birth</b>	Yes	358/358	100	100	-
<b>Citizenship</b>	Sri Lankan	358/358	100	100	-
<b>Country of birth</b>	Sri Lanka	358/358	100	100	-

Table 143: Socio-demographic characteristics, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ethnicity</b>				
Sinhalese	350/358	97.8	97.8	96.5 – 99.2
Sri Lankan Tamil	6/358	1.7	1.5	0.4 – 2.5
Indian Tamil	0/358	-	-	-
Moor	2/358	0.6	6.1	0.0 – 1.4
Burgher / Malay	0/358	-	-	-
	0/358	-	-	-
<b>District of residence during the past one year</b>				
Anuradhapura	355/358	99.3	98.8	97.4 – 100.0
Other <sup>88</sup>	3/358	0.8	1.2	0.0 – 2.6
<b>Length of time lived in Anuradhapura</b>				
< 1 year	2/356	0.6	0.7	0.0 – 1.4
≥ 1 year	354/356	99.4	99.3	98.6 – 99.9
<b>Primary residence</b>				
Anuradhapura	340/358	95.0	95.3	93.5 – 97.3
Other	18/358	5.0	3.7	2.7 – 6.5
<b>Language spoken at home</b>				
Sinhalese	353/358	97.8	98.6	97.5 – 99.7
Tamil	8/358	2.2	2.1	0.3 – 2.5
English	0/358	-	-	-
<b>Literate</b>				
Yes	349/358	97.5	96.7	94.6 – 98.5
<b>Highest level of education</b>				
Never attended school	3/358	0.8	1.1	0.0 – 2.5
Grade 1-5	9/358	2.5	2.2	0.9 – 3.4
Grade 6-10	79/358	22.1	26.0	22.6 – 31.9
Passed O/L	178/358	49.7	47.9	42.7 – 52.0
Passed A/L	85/358	23.7	22.0	17.7 – 25.1
Completed Diploma	1/358	0.3	0.2	0.0 – 0.4
Completed Degree	3/358	0.8	0.7	0.0 – 1.6
<b>Currently a student</b>				
Yes	1/358	0.3	0.1	0 – 0.4
<b>Type of institution enrolled in</b> (among current students)				
University	0/1	-	-	-
Technical College	1/1	100	100	-
Vocational School	0/1	-	-	-
<b>Monthly personal income</b>				
< 5,000 Rupees	24/342	7.0	8.3	5.7 – 11.6
5,000-10,000	52/342	15.2	15.3	11.7 – 18.8
10,001-20,000	68/342	19.9	20.1	16.3 – 24.1
20,001-30,000	93/342	27.2	27.5	23.4 – 31.9
30,001-40,000	80/342	23.4	22.7	18.0 – 26.9
> 40,000	19/342	5.6	4.0	1.9 – 4.9
Don't know	6/342	1.8	2.2	0.6 – 4.0

<sup>88</sup> Other: Colombo (n=1), Galle (n=1), Polonnaruwa (n=1)

Table 143: Socio-demographic characteristics, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of people dependent on that income</b>				
Mean	2.8	-	2.7	-
SD	1.7	-	1.7	-
Median	3.0	-	3.0	-
Range	0 – 10	-	-	-
0	22/358	6.1	5.9	3.7 – 8.1
1	94/358	26.3	29.5	26.0 – 35.2
2	32/358	8.9	9.2	6.5 – 12.0
3	64/358	17.9	17.3	13.6 – 20.6
4	85/358	23.7	23.2	18.9 – 27.1
5 and more	61/358	17.0	14.9	11.3 – 17.2
<b>Occupation</b>				
Street vendor/casual labourer	68/313	21.7	23.2	20.0 – 28.3
Factory worker	34/313	10.9	9.9	6.7 – 12.5
Professional/banker/accountant	4/313	1.3	1.0	0.2 – 1.6
Teacher	2/313	0.6	0.4	0.0 – 0.8
Business owner	22/313	7.0	7.2	4.7 – 9.9
Hairdresser/beautician/masseur	9/313	2.9	3.0	1.2 – 5.1
Waiter/bartender/hotel employee	11/313	3.5	4.3	2.0 – 7.2
Musician/dancer/performer	4/313	1.3	1.3	0.0 – 2.6
Tourism/travel agent/tour guide	4/313	1.3	0.8	0.2 – 1.2
Government worker	74/313	23.6	20.8	14.3 – 25.6
Security guard	1/313	0.3	0.3	0.0 – 0.8
Fisherman/seafarer	4/313	1.3	1.7	0.0 – 3.8
Farmer/agriculture worker	11/313	3.5	3.9	1.8 – 6.4
Taxi driver/Three wheeler driver	52/313	16.6	17.1	13.1 – 21.4
Other: unemployed	9/313	2.9	3.3	1.0 – 5.8
Other <sup>89</sup>	4/313	1.3	1.5	0.1 – 3.1

Approximately half of MSM in Anuradhapura are single (never married) (55.2%), while the other half are married (44.9%) (Table 144). Over two thirds (39.9%) have children.

Table 144: Marital status, living arrangements, and children, MSM Anuradhapura

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Marital status</b>				
Single (Never married)	200/358	55.9	55.2	50.1 – 60.1
Living together but not married	0/358	-	-	-
Married	158/358	44.1	44.9	39.9 – 49.8
Divorced/Separated	0/358	-	-	-
Widowed	0/358	-	-	-

<sup>89</sup> Other: Student (n=1), police officer (n=1), retired (n=1), phone repairs (n=1)

Table 144: Marital status, living arrangements, and children, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Type of residence</b>				
Temporary shelter	8/358	2.2	2.8	1.0 – 4.7
Boarding house	16/358	4.5	5.0	3.0 – 7.0
Parents' home	111/358	31.0	32.6	27.8 – 37.5
My home	221/358	61.7	58.7	53.7 – 63.7
Lodging	1/358	0.3	0.6	0.5 – 0.7
On the street	0/358	-	-	-
Brothel	0/358	-	-	-
Other	1/358	0.3	0.2	0 – 1.1
<b>Has children</b>				
Yes	145/358	40.5	39.9	34.7 – 44.8
<b>Number of children</b> (among those who have children)				
1	49/145	33.8	32.8	25.5 – 39.6
2	63/145	43.4	46.3	39.4 – 55.3
3	27/145	18.6	17.0	10.5 – 22.3
4	5/145	3.4	2.9	0.3 – 5.1
5 or more	1/145	0.7	0.9	0.0 – 3.0
<b>Belongs to MSM group</b>				
Nachchi	91/356	25.6	24.0	19.4 – 27.5
Male sex worker	19/356	5.3	5.3	3.3 – 7.3
Other MSM	250/356	70.2	72.3	68.8 – 77.5

### 9.3.8 General sexual history

Most MSM in Anuradhapura have had anal sex with a man (94.7%) and sex with a woman (91.3%) (Table 145). The average age of first anal sex with a man is 19.3. The average number of sexual partners in the seven days is 1.3, with an average of 1.2 casual partners, and 0.6 regular partners. Anal sex is frequent, with over three quarters having anal sex every time, or almost every time they have had sex in the last six months. Only just over half (54.7%) used a condom at last anal sex.

Table 145: General sexual history, MSM Anuradhapura

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever had sex with a woman</b> (vaginal or anal)				
Yes	327/357	91.6	91.3	88.6
<b>Ever had anal sex with a man</b>				
Yes	336/356	93.9	94.7	92.8 – 96.9
<b>Age at first anal sex with a man</b>				
Mean	19.5	-	19.3	-
SD	4.86	-	4.9	-
Median	18.0	-	18.0	-
Range	8-54	-	-	-



Table 145: General sexual history, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Age groups at first anal sex with a man</b>				
< 16	37/329	11.2	12.1	9.1 – 15.7
16 – 18	149/329	45.3	46.2	41.3 – 51.6
19 – 24	97/329	29.5	29.0	24.3 – 33.2
≥ 25	46/329	14.0	12.8	9.0 – 15.8
<b>Age of partner at first anal sex with a man</b>				
Mean	21.9	-	21.9	-
SD	6.47	-	6.5	-
Median	20.0	-	20.0	-
Range	8-60	-	-	-
<b>Age groups of partner at first anal sex with a man</b>				
< 16	34/328	10.4	11.1	8.0 – 14.6
16 – 18	88/328	26.8	30.0	26.0 – 36.0
19 – 24	111/328	33.8	30.8	25.7 – 34.1
≥ 25 <sup>90</sup>	95/328	29.0	28.1	23.2 – 32.4
<b>Number of all sexual partners in the last 7 days</b>				
Mean	1.4	-	1.3	-
SD	1.7	-	1.4	-
Median	1.0	-	1.0	-
Range	0 – 15	-	-	-
0	104/358	29.1	27.7	23.1 – 31.3
1	127/358	35.5	36.8	32.6 – 41.9
2	83/358	23.2	23.5	19.7 – 27.5
3 or more	44/358	12.3	12.0	8.9 – 15.0
<b>Number of casual sexual partners in the last 7 days</b> (among those who reported at least one sex partner)				
Mean	1.3	-	1.2	-
SD	1.7	-	1.4	-
Median	1.0	-	1.0	-
Range	0 – 15	-	-	-
0	74/254	29.1	29.4	24.4 – 34.8
1	102/254	40.2	40.0	34.3 – 45.6
2	54/254	21.3	22.4	17.8 – 27.6
3 or more	24/254	9.4	8.2	4.9 – 10.6

<sup>90</sup> Only two persons 50+ therefore further analysis for sex is not possible. Also, the median and mean are rather similar for the age of first anal sex and the age of first partner. The average difference is 2.4 years. Data for intergenerational sex trends is not present.

Table 145: General sexual history, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of regular sexual partners in the last 7 days</b> (among those who reported at least one sex partner)				
Mean	0.6	-	0.6	-
SD	0.9	-	0.9	-
Median	-	-	-	-
Range	0 – 5	-	-	-
0	142/254	55.9	55.2	48.9 – 60.9
1	80/254	31.5	33.5	28.3 – 40.0
2	23/254	9.1	8.2	5.0 – 10.8
3 or more	9/254	3.5	3.1	9.0 – 5.2
<b>Number of all sexual partners in the last 6 months</b>				
Mean	7.3	-	7.5	-
SD	7.6	-	7.4	-
Median	5.0	-	6.0	-
Range	1 – 70	-	-	-
0	0/358	-	-	-
1	49/358	13.7	11.9	8.3 – 14.7
2	60/358	16.8	16.9	13.3 – 20.4
3 – 5	74/358	20.7	19.4	15.3 – 22.7
6 or more	175/358	48.9	51.8	47.1 – 58.6
<b>Number of casual sexual partners in the last 6 months</b>				
Mean	5.2	-	5.2	-
SD	6.5	-	6.3	-
Median	3.0	-	4.0	-
Range	0 – 70	-	-	-
0	36/358	10.1	10.2	7.4 – 13.1
1	54/358	15.1	12.5	8.8 – 14.5
2	59/358	16.5	17.1	13.8 – 20.9
3 – 5	90/358	25.1	25.8	21.9 – 29.9
6 or more	119/358	33.2	34.4	30.2 – 39.5
<b>Number of regular sexual partners in the last 6 months</b>				
Mean	2.1	-	2.2	-
SD	3.2	-	3.1	-
Median	1.0	-	1.0	-
Range	0 – 25	-	-	-
0	152/358	42.5	39.3	32.5 – 43.8
1	53/358	14.8	14.9	11.4 – 18.4
2	41/358	11.5	11.6	8.7 – 14.7
3 – 5	79/358	22.1	24.3	20.3 – 29.8
6 or more	33/358	9.2	10.0	6.9 – 13.6

Table 145: General sexual history, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Had anal sex with partners in the last 6 months</b>				
Every time	182/331	55.0	52.0	46.2 – 55.9
Almost every time	79/331	23.9	25.7	21.4 – 31.1
Sometimes	52/331	15.7	17.6	14.2 – 22.0
Never	14/331	4.2	36.8	1.7 – 5.3
Don't know	4/331	1.2	1.0	0.1 – 1.8
<b>Used a condom at last anal sex</b>				
Yes	190/328	57.9	54.7	48.8 – 58.5

### 9.3.9 Experience with sex work

Over one third (36.9%) of MSM in Anuradhapura have received money, goods or services in exchange for sex, and among them many (88.4%) have done so in the past 12 months (Table 146). The sex of their partner the last time they sold sex was predominantly male (93.0%), and two thirds (67.1%) used a condom the last time they sold sex. A far lower percentage have paid for sex (21.6%), and even fewer have done so in the last 12 months (18.7%). Paying for sex was largely to males (80.2%), and nearly three quarters used a condom (71.6%).

Table 146: Experience with sex work, MSM Anuradhapura

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever received money, goods or services in exchange for sex</b>				
Yes	135/357	37.8	36.9	32.0 – 41.2
<b>Received money, goods or services in exchange for sex in last 12 months</b>				
Yes (among those who ever sold sex)	118/135	87.4	88.4	84.5 – 93.2
Yes (among all)	118/358	33.0	32.7	28.1 – 37.1
<b>Sex of partner last time they received money, goods or services in exchange for sex</b>				
Female	9/135	6.7	7.0	1.9 – 12.4
Male	126/135	93.3	93.0	87.6 – 98.1
<b>Used a condom last time they received money, goods or services in exchange for sex</b>				
Yes	88/135	65.2	67.1	60.4 – 75.2
<b>Ever given money, goods or services in exchange for sex</b>				
Yes	76/358	21.2	21.6	17.8 – 25.5
<b>Given money, goods or services in exchange for sex in last 12 months</b>				
Yes (among those who ever paid for sex)	65/76	85.5	86.6	81.3 – 92.4
Yes (among all)	65/358	18.2	18.7	15.0 – 22.7

Table 146: Experience with sex work, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Sex of partner last time they gave money, goods or services in exchange for sex</b>				
Female	14/76	18.4	19.8	0.0 – 41.0
Male	62/76	81.6	80.2	59.0 – 100.0
<b>Used a condom last time they gave money, goods or services in exchange for sex</b>				
Yes	54/76	71.1	71.6	61.7 – 81.9

### 9.3.10 Sexual history with casual male partners

Only a third of MSM in Anuradhapura used a condom every time they had sex with a casual male partner, in the last six months, although just over half (50.6%) indicate using a condom at last anal sex, specifically (Table 147). Nearly always the MSM himself is the person to suggest condom use (96.7%), and the reason for use is predominantly to prevent HIV and STIs (98.8%). Multiple reasons were provided for lack of condom use, including not thinking of it (24.1%), not thinking it was necessary (21.4%), and not being available (21.2%), similar to the other districts in terms of MSM data. The most common places to meet a casual partner also follow the similar trend to other districts, most notably through friends (30.1%), motel/guest house (29.0%), and street/park/public transport (24.5%).

Table 147: Sexual history with casual male partners, MSM Anuradhapura

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Condo2m use during last 6 months</b>				
Every time	111/315	35.2	32.2	26.4 – 36.0
Almost every time	57/315	18.1	19.7	15.9 – 24.6
Sometimes	57/315	18.1	19.5	15.5 – 24.6
Never	75/315	23.8	23.5	19.0 – 27.9
Don't know	15/315	4.8	5.0	2.8 – 7.4
<b>Used a condom at last anal sex</b>				
Yes	173/325	53.2	50.6	44.6 – 54.9
<b>Person who suggested to use a condom</b>				
MSM	168/173	97.1	96.7	94.1 – 99.2
Partner	5/173	2.9	32.6	8.5 – 5.9
<b>Reasons for using a condom</b> (multiple answers possible)				
To prevent HIV/STIs	170/173	98.3	98.8	97.9 – 99.9
Do not trust partner	6/173	3.5	2.9	0.8 – 4.6
Messages advising use of condoms	1/173	0.6	0.6	0.0 – 1.4
To prevent pregnancy	0/173	-	-	-
Something else	1/173	0.6	1.0	0.0 – 2.7

Table 147: Sexual history with casual male partners, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for not using a condom</b> (multiple answers possible)				
Never heard of condoms	5/152	3.3	2.5	0.2 – 4.3
Don't know how to obtain condoms	5/152	3.3	3.7	0.8 – 6.9
Didn't think it was necessary	34/152	22.4	21.4	11.2 – 27.8
Didn't think of it	37/152	24.3	24.1	17.1 – 30.1
Not available	29/152	19.1	21.2	14.6 – 28.9
Too expensive	4/152	2.6	4.2	1.4 – 7.8
Partner objected	16/152	10.5	10.1	5.4 – 14.5
Don't like them	13/152	8.6	11.3	6.9 – 17.3
Used other contraceptive	0/152	-	-	-
Used other prevention method	1/152	0.7	0.7	0 – 1.9
Partner was faithful	12/152	7.9	7.9	3.1 – 12.8
Condoms take away pleasure	24/152	15.8	15.7	9.5 – 21.9
<b>Places where last casual partner was met</b> (multiple answers possible)				
Brothel	5/339	1.5	1.3	0.2 – 2.1
Bar/café/disco/restaurant/club	22/339	6.5	6.8	4.4 – 9.4
Hotel	46/339	13.6	15.5	12.0 – 20.3
Street, park, or public transport	90/339	26.5	24.5	20.0 – 28.0
Through friends	111/339	32.7	30.1	25.0 – 33.6
Internet, chat, or SMS	2/339	0.6	0.7	0.03 – 1.4
Motel or guest house	90/339	26.5	29.0	24.9 – 34.6
School	1/339	0.3	0.3	0 – 0.6
Party	9/339	2.7	2.9	1.2 – 4.7
Intermediary	2/339	0.6	0.5	0 – 8.5
Service station	11/339	3.2	4.0	2.2 – 6.4
Truck stop / three wheeler stop	2/339	0.6	0.5	0 – 1.0
Massage parlour/Spa	1/339	0.3	0.3	0 – 1.0
Don't know	1/339	0.3	0.3	0 – 0.8
<b>Last casual sexual partner's HIV status</b>				
Negative	292/338	86.4	85.7	81.8 – 89.3
Positive	1/338	0.3	0.2	0 – 4.2
Don't know	45/338	13.3	14.1	10.5 – 18.0

### 9.3.11 Sexual behaviour with regular male partners

Condom use with regular male partners in the last six months varied, with approximately a third of MSM in Anuradhapura using condoms almost every time (26.1%), and another third sometimes (27.1%), while only less than a third (15.1%) used a condom every time they had anal sex in the last six months (Table 148). Just over a third of MSM in Anuradhapura used a condom at last anal sex with a casual partner. The primary reasons for using a condom is to prevent HIV and STIs (98.9%), while the main reasons for lack of condom usage are partner was faithful (30.8%), condoms take away pleasure (20.9%), and not thinking it was necessary (20.8%). The same pattern in terms of places to meet regular partners is found with meeting casual partners, motels and guesthouses (36.9%), through friends (29.4%) and in the street, park and via public transport (20.6%).

**Table 148: Sexual behaviour with regular male partners, MSM Anuradhapura**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Condom use during last 6 months</b>				
Every time	33/205	16.1	15.1	10.0 – 19.6
Almost every time	55/205	26.8	26.1	20.6 – 31.3
Sometimes	53/205	25.9	27.1	20.5 – 34.5
Never	47/205	22.9	23.3	18.1 – 28.7
Don't know	17/205	8.3	8.3	5.1 – 11.6
<b>Used a condom at last anal sex</b>				
Yes	98/253	38.7	37.6	31.5 – 42.4
<b>Person who suggested to use a condom</b>				
MSM	95/98	96.9	95.8	89.7 – 100.0
Partner	3/98	3.1	4.2	0.0 – 10.3
<b>Reasons for using a condom</b> (multiple answers possible)				
To prevent HIV/STIs	97/98	99.0	98.9	97.2 – 100.0
Do not trust partner	2/98	2.0	2.1	0.0 – 4.5
Messages advising use of condoms	0/98	-	-	-
To prevent pregnancy	0/98	-	-	-
<b>Reasons for not using a condom</b> (multiple answers possible)				
Never heard of condoms	0/155	-	-	-
Don't know how to obtain condoms	2/155	1.3	1.1	0 – 2.1
Didn't think it was necessary	38/155	24.5	20.8	13.5 – 25.9
Didn't think of it	31/155	20.0	19.9	13.8 – 25.4
Not available	16/155	10.3	11.3	6.8 – 16.2
Too expensive	3/155	1.9	2.1	0 – 4.3
Partner objected	15/155	9.7	10.3	5.5 – 15.4
Don't like them	11/155	7.1	8.3	4.4 – 12.9
Used other contraceptive	0/155	-	-	-
Used other prevention method	1/155	0.6	0.7	0 – 1.8
Partner was faithful	44/155	28.4	30.8	23.5 – 39.4
Condoms take away pleasure	31/155	20.0	20.9	14.0 – 28.3
<b>Places where last regular partner was met</b> (multiple answers possible)				
Brothel	0/266	-	-	-
Bar/café/disco/restaurant/club	17/266	6.4	6.9	4.1 – 10.1
Hotel	37/266	13.9	15.1	11.2 – 19.8
Street, park, or public transport	60/266	22.6	20.6	15.1 – 24.9
Through friends	81/266	30.5	29.4	24.0 – 34.3
Internet, chat, or SMS	2/266	0.8	0.7	0 – 1.6
Motel or guest house	95/266	35.7	36.9	31.6 – 42.9
School	1/266	0.4	3.5	0 – 0.8
Party	8/266	3.0	4.0	1.5 – 7.1
Intermediary	1/266	0.4	0.3	0 – 0.8
Service station	7/266	2.6	3.1	1.2 – 5.2
Truck stop / three wheeler stop	0/266	-	-	-
Massage parlour/Spa	1/266	0.4	0.5	0 – 1.3
<b>Last regular sexual partner's HIV status</b>				
Negative	239/266	89.8	88.8	84.9 – 92.2
Positive	0/266	-	-	-
Don't know	27/266	10.2	11.2	7.8 – 15.1

### 9.3.12 Sexual behaviour with women

Of those who have ever had sex with women, nearly all (92.6%) have had sex with a woman in the last six months (Table 149). As with the other districts, and across casual partners as well, typically the MSM suggests condom usage (93.6%). Reasons for using condoms include preventing HIV and STIs, and for the first time across the data, a noticeable number of respondents indicated also to prevent pregnancy (17.4%). The reasons for lack of condom usage include not thinking it was necessary (29.0%), condoms take away pleasure (26.3%), and partner was faithful (20.3%). Female partners are met at the same locations as male partners, at motels or guest houses (31.3%) or hotels (26.5%), in the street/park/public transport (20.7%) and through friends (24.6%). Most respondents report knowing or believing the HIV status of their last female partner as negative (88.1%). The variable condom use during the last six months with women has been excluded from the analysis due to an error in the ODK data collection skip function.

**Table 149: Sexual behaviour with women, MSM Anuradhapura**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Had sex with a female partner in the last 6 months</b>				
Yes	303/327	92.7	92.6	89.8 – 95.5
<b>Used a condom at last sex with a female partner</b>				
Yes	168/323	52.0	49.9	44.5 – 53.9
<b>Person who suggested to use a condom</b>				
MSM	156/168	92.9	93.6	91.0 – 96.8
Woman	11/168	6.5	5.8	2.7 – 8.4
Don't know	1/168	0.6	0.5	0.0 – 1.3
<b>Reasons for using a condom</b> (multiple answers possible)				
To prevent HIV/STIs	162/168	96.4	96.3	93.5 – 98.9
Do not trust partner	6/168	3.6	3.2	0.4 – 5.6
Messages advising use of condoms	1/168	0.6	1.0	0.0 – 2.5
To prevent pregnancy	26/168	15.5	17.4	11.7 – 24.7
<b>Reasons for not using a condom</b> (multiple answers possible)				
Never heard of condoms	2/155	1.3	1.1	0.0 – 2.5
Don't know how to obtain condoms	3/155	1.9	2.9	0.0 – 6.7
Didn't think it was necessary	52/155	33.5	29.0	21.1 – 34.4
Didn't think of it	26/155	16.8	16.3	10.6 – 21.8
Not available	13/155	8.4	9.3	4.7 – 14.3
Too expensive	0/155	-	-	-
Partner objected	14/155	9.0	10.2	5.6 – 15.5
Don't like them	3/155	1.9	3.3	0.0 – 7.8
Used other contraceptive	3/155	1.9	2.1	0.0 – 4.2
Used other prevention method	0/155	-	-	-
Partner was faithful	29/155	18.7	20.3	14.4 – 27.3
Condoms take away pleasure	39/155	25.2	26.3	19.6 – 33.6

Table 149: Sexual behaviour with women, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Places where last female partner was met</b> (multiple answers possible)				
Brothel	32/325	9.8	9.4	6.5 – 12.1
Bar/café/disco/restaurant/club	18/325	5.5	6.7	4.1 – 10.1
Hotel	81/325	24.9	26.5	22.5 – 31.7
Street, park, or public transport	71/325	21.8	20.7	16.3 – 24.2
Through friends	86/325	26.5	24.6	19.8 – 28.3
Internet, chat, or SMS	1/325	0.3	0.3	0 – 0.9
Motel or guest house	91/325	28.0	31.3	27.5 – 37.2
School	1/325	0.3	0.3	0 – 0.9
Party	3/325	0.9	1.1	0 – 2.2
Intermediary	2/325	0.6	0.5	0 – 1.0
Service station	3/325	0.9	0.7	0.03 – 1.2
Truck stop / three wheeler stop	0/325	-	-	-
Massage parlour/Spa	0/325	-	-	-
Don't know	1/325	0.3	0.1	0 – 0.2
<b>Last female sexual partner's HIV status</b>				
Negative	290/327	88.7	88.1	84.6 – 91.6
Positive	1/327	0.3	0.2	0.0 – 0.3
Don't know	36/327	11.0	11.7	8.0 – 15.3

### 9.3.13 Male condom availability and use

Nearly all MSM in Anuradhapura have heard of male condoms (98.1%), ever used a male condom (84.2%) and know a place where to obtain (93.0%) (Table 150). The most common venues to obtain condoms, and where currently provide the main source include private pharmacies and chemists (76.2% and 71.3%, respectively) and Government STD clinics (31.3% and 31.1%, respectively). Less than a third (31.8%) of MSM in Anuradhapura have received a free condom from an NGO or health service in the last 12 months. Most MSM find condoms very or somewhat affordable (84.7%) and easy to obtain (84.7%).

Table 150: Male condom availability and use, MSM Anuradhapura

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of a male condom</b>				
Yes	352/358	98.3	98.1	96.7 – 99.5
<b>Ever used a male condom</b>				
Yes	298/352	84.7	84.2	80.6 – 87.3
<b>Knows where to obtain male condoms</b>				
Yes	328/351	93.4	93.0	90.1 – 95.5



Table 150: Male condom availability and use, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Places where they can obtain male condoms</b> (multiple answers possible)				
Government STD clinic	110/328	33.5	31.3	25.1 – 35.8
Government non-STD clinic	15/328	4.6	4.5	2.3 – 6.7
Private clinic	13/328	4.0	3.8	1.9 – 5.7
Private pharmacy or chemist	242/328	73.8	76.2	72.9 – 81.3
Traditional healer/Herbalist Neighbourhood market/Stand	1/328	0.3	0.3	0 – 0.7
Friends	39/328	11.9	12.7	9.1 – 17.0
Sex partner/s	20/328	6.1	6.8	4.5 – 9.7
Bar	1/328	0.3	0.3	0 – 0.7
Service Station/s	1/328	0.3	0.2	0 – 0.3
	4/328	1.2	1.3	0.2 – 2.5
<b>Main source/s of condoms</b> (multiple answers possible)				
Government STD clinic	120/350	34.3	31.1	25.0 – 34.8
Government non-STD clinic	16/350	4.6	5.0	2.8 – 7.4
Private clinic	14/350	4.0	3.5	1.9 – 4.9
Private pharmacy or chemist	239/350	68.3	71.3	68.2 – 76.6
Traditional healer/Herbalist Neighbourhood market/Stand	1/350	0.3	0.3	0 – 0.6
Friends	30/350	8.6	9.4	6.8 – 12.6
Sex partner/s	17/350	4.9	5.6	3.4 – 8.2
Bar	3/350	0.9	0.7	0.1 – 1.3
Service Station/s	1/350	0.3	0.2	0 – 0.3
Don't know	4/350	1.1	1.2	0.2 – 2.3
Other <sup>91</sup>	7/350	2.0	2.2	0.9 – 3.5
<b>Usually carries condoms</b>				
Yes	115/352	32.7	31.7	27.0 – 35.7
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>				
Yes	113/352	32.1	31.8	27.1 – 36.2
<b>Condom is affordable</b>				
Very affordable	153/337	45.4	44.3	38.8 – 48.8
Somewhat affordable	132/337	39.2	40.4	35.9 – 45.7
Not affordable	32/337	9.5	9.8	6.9 – 12.7
Don't know	20/337	5.9	5.6	3.2 – 7.9
<b>Condom is easy to obtain</b>				
Very easy	154/339	45.4	44.0	38.7 – 48.3
Somewhat easy	134/339	39.5	40.7	36.3 – 46.0
Not easy	29/339	8.6	9.1	6.5 – 12.1
Don't know	22/339	6.5	6.2	3.8 – 8.4

### 9.3.14 Lubricant availability and use

Just over half (52.7%) of MSM in Anuradhapura have heard of lubricant, and just over half (52.5%) use lubricant 'usually' or 'always' (Table 151). The most common type of lubricant used is saliva/water (62.5%), followed by glycerine (53.7%).

<sup>91</sup> Other: Do not use condoms (n=5)

**Table 151: Lubricant availability and use, MSM Anuradhapura**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of lubricant</b>				
Yes	201/358	56.1	52.7	47.0 – 56.1
<b>Lubricant use during vaginal or anal sex</b>				
Always	94/201	46.8	44.0	36.1 – 50.1
Usually	16/201	8.0	8.5	4.6 – 12.7
Sometimes	18/201	9.0	10.7	6.7 – 16.2
Rarely	19/201	9.5	9.7	6.0 – 13.4
Never	54/201	26.9	27.0	20.9 – 33.2
<b>Type of lubricant used</b> (multiple answers possible)				
Glycerine	79/147	53.7	53.3	45.3 – 60.8
Saliva/Water	93/147	63.3	62.5	54.5 – 69.8
Vaseline	21/147	14.3	13.2	8.3 – 17.3
Baby Oil	22/147	15.0	12.4	7.0 – 16.0
Lotion	17/147	11.6	11.4	6.2 – 16.5
Other Oil	2/147	1.4	1.9	0.0 – 4.3
Water-Based	12/147	8.2	8.0	4.0 – 11.9
Silicon-based	9/147	6.1	7.1	3.7 – 11.2
Soap	3/147	1.0	2.1	0.0 – 4.3
What I get from peer educator	0/147	-	-	-
Don't know	1/147	0.7	1.2	0.0 – 3.6
<b>Interested in using lubricant in the future</b>				
Yes	159/199	79.9	80.0	73.8 – 86.3

### 9.3.15 Knowledge of STI symptoms in women and men

Just over two thirds (68.4%) of MSM in Anuradhapura have heard of diseases that can be transmitted sexually and just over a half (58.5%) know that it is possible to have an STI without any symptoms (Table 152). The most commonly mentioned STI symptoms in women and men, included genital discharge and abdominal pain. Among those who have heard of STIs, less than five percent could not name any signs of STIs in women (4.2% %) or men (2.9%).

**Table 152: Knowledge of STI symptoms in women and men, MSM Anuradhapura**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of diseases that can be transmitted sexually</b>				
Yes	254/358	70.9	68.4	63.1 – 72.1
<b>Knows it is possible to have an STI without symptoms</b>				
Yes	222/357	62.2	58.5	53.5 – 63.5

Table 152: Knowledge of STI symptoms in women and men, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Mentioned as a sign/symptom of STIs in women</b> (multiple answers possible)				
Abdominal pain	112/254	44.1	45.2	39.5 – 51.6
Genital discharge	177/254	69.7	69.7	63.9 – 75.6
Foul smelling discharge	31/254	12.2	12.6	8.6 – 17.1
Burning pain on urination	113/254	44.5	41.3	34.7 – 45.7
Genital ulcers or sores	62/254	24.4	23.8	18.4 – 28.8
Swelling in groin area	42/254	16.5	16.6	12.3 – 21.1
Itching	59/254	23.2	19.8	14.2 – 23.2
<b>Does not know any symptoms of STIs in women</b>				
Yes	9/254	3.5	4.2	1.8 – 7.1
<b>Mentioned as a sign/symptom of STIs in men</b> (multiple answers possible)				
Abdominal pain	112/254	44.1	44.6	38.8 – 50.5
Genital discharge	170/254	66.9	67.3	61.6 – 73.6
Foul smelling discharge	28/254	11.0	11.1	7.3 – 14.9
Burning pain on urination	130/254	51.2	48.0	40.9 – 52.8
Genital ulcers or sores	53/254	20.9	22.1	17.3 – 27.9
Swelling in groin area	49/254	19.3	18.1	13.3 – 22.1
Itching	64/254	25.2	22.8	17.2 – 26.7
<b>Does not know any symptoms of STIs in men</b>				
Yes	6/254	2.4	2.9	0.8 – 5.4
<b>Places where someone from the community who has an STI can get treatment</b> (multiple answers possible)				
Ayurvedic physician	0/358	0.0	0.0	-
Pharmacy	1/358	0.3	0.0	0.0 – 0.3
Private clinic	30/358	8.4	8.5	5.9 – 11.3
Government STD clinic	267/358	74.6	72.3	67.0 – 76.0
Government clinic or hospital (non-STD)	43/358	12.0	12.4	9.4 – 15.6
Don't know	35/358	9.8	11.8	8.8 – 16.0

### 9.3.16 Patterns of STI care seeking

Few MSM in Anuradhapura self report discharge (2.2%) or ulcers/sores (1.7%) in the last twelve months, but most of those who did sought treatment (80.2% and 100%, respectively) (Table 153). As per the trends across the other districts, private clinics (60.7%) and private pharmacies (24.0%) are the most common places to seek treatment for an STI, the reasons being a recommendation by a friend (65.0%) and confidentiality (56.7%). All MSM were very satisfied (59.5%) or somewhat satisfied (40.5%) with the treatment they received from the providers.

**Table 153: Patterns of STI care seeking, MSM Anuradhapura**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Doctor confirmed STI in the last 12 months</b>				
Yes	17/254	6.7	7.1	4.4 – 10.1
<b>STI symptoms (discharge) in the last 12 months</b>				
Yes	9/358	2.5	2.2	0.9 – 3.2
<b>Sought treatment for discharge</b>				
Yes	6/9	66.7	80.2	76.0 – 96.3
<b>Reasons for not seeking treatment for discharge</b> (multiple answers possible)				
Didn't know where to go	2/2	100	100	-
Embarrassed or afraid	0/2	-	-	-
Could not afford treatment	0/2	-	-	-
Unable to get transportation	0/2	-	-	-
Didn't think I needed it	0/2	-	-	-
<b>STI symptoms (sore or ulcer) in the last 12 months</b>				
Yes	4/358	1.1	1.7	0.3 – 3.4
<b>Sought treatment for sore or ulcer</b>				
Yes	4/4	100	100	-
<b>Reasons for not seeking treatment for sore or ulcer</b> (multiple answers possible)				
Didn't know where to go	-	-	-	-
Embarrassed or afraid	-	-	-	-
Could not afford treatment	-	-	-	-
Unable to get transportation	-	-	-	-
Didn't think I needed it	-	-	-	-
<b>Places where STI treatment (for discharge, sore, or ulcer) was sought</b> (multiple answers possible)				
Government STD clinic	2/10	20.0	10.1	0.0 – 17.4
Government non-STD clinic	0/10	-	-	-
Private clinic	6/10	60.0	60.7	30.3 – 94.4
Private pharmacy or chemist	1/10	10.0	24.0	0.0 – 63.7
Traditional healer/Herbalist	0/10	-	-	-
Medicine or herbs from home	0/10	-	-	-
Don't know	1/10	10.0	4.6	0.0 – 6.7
<b>Reasons for choosing this/these places</b> (multiple answers possible)				
Confidentiality	7/10	70.0	56.7	19.7 – 86.3
Affordability	0/10	-	-	-
Recommendation by friend or acquaintance	5/10	50.0	65.0	43.4 – 96.7
Quality and/or specialized care given at this place	0/10	-	-	-
Knows the caregivers	0/10	-	-	-
Known friendliness of the caregivers	0/10	-	-	-
Proximity/Location	0/10	-	-	-
Other/No specific reason	1/10	10.0	12.4	0.0 – 34.4

Table 153: Patterns of STI care seeking, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Told health care provider that they have sex with men last time they received STI treatment or diagnosis</b>				
Yes	5/10	50.0	42.1	9.1 – 70.2
<b>Satisfaction with treatment from health care provider during last visit for STI treatment</b>				
Very satisfied	6/9	66.7	59.5	21.3 – 91.7
Somewhat satisfied	3/9	33.3	40.5	8.3 – 78.7
Not satisfied	0/9	-	-	-
Don't know	0/9	-	-	-

### 9.3.17 HIV information and personal risk perception

Over three quarters (79.4%) of MSM in Anuradhapura have heard of HIV/AIDS, with the primary sources of information from health services (43.4%) and school (14.3) (Table 154). When asked if they had discussed HIV with any sexual partners, approximately a two thirds did either with some or all of their partners. Of those who did, just over half (51.7%) had all partners tell them their HIV status. Just over a third (36.9%) of respondents know someone who is HIV positive or had died of HIV/AIDS. Nearly half (44.6%) of MSM in Anuradhapura believe they are not at risk for HIV, and another large percent believe they are at a small risk (43.6%). The reasons for believing they are not at risk include trusting their partner (86.2%) and always using condoms (11.9%). Those who do believe they are at some risk indicate the reasons as having many sexual partners (75.6%) and not always using condoms (15.8%). Of the three MSM in Anuradhapura who perceived themselves as high risk, only two used a condom at last anal sex (data not shown).

Table 154: HIV information and personal risk perception, MSM Anuradhapura

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of HIV/AIDS</b>				
Yes	286/357	80.1	79.4	75.3 – 83.0
<b>Main source of the most thorough information about HIV/AIDS</b>				
School	43/286	15.0	14.3	10.1 – 17.9
Health services	129/286	45.1	43.4	37.1 – 48.5
Workplace	18/286	6.3	6.2	3.4 – 8.7
Friends/Family	11/286	3.8	4.9	2.4 – 8.0
Television	30/286	10.5	11.5	7.5 – 16.2
Newspaper/Magazines	15/286	5.2	6.4	3.8 – 9.7
Posters/Billboards	4/286	1.4	1.2	0.2 – 2.0
Pamphlets/Leaflets	7/286	2.4	3.4	0.6 – 6.7
Radio	4/286	1.4	1.4	0.4 – 2.5
NGOs	22/286	7.7	6.8	3.8 – 9.2
Other	3/286	1.0	0.7	0.0 – 1.1

Table 154: HIV information and personal risk perception, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Discussed HIV/AIDS with any sexual partner</b>				
Yes, all	108/287	37.6	35.2	29.0 – 39.8
Yes, some	81/287	28.2	27.3	22.4 – 31.8
No, none	87/287	30.3	33.4	28.7 – 40.1
Don't know	11/287	3.8	4.0	1.8 – 6.4
<b>Sexual partner/s told them their HIV status (among those who discussed HIV/AIDS with their partners)</b>				
Yes, all	100/189	52.9	51.7	44.6 – 58.0
Yes, some	65/189	34.4	34.1	27.7 – 40.3
No, none	24/189	12.7	14.2	9.4 – 20.0
<b>Knows somebody who is HIV-positive or has died of AIDS</b>				
Yes	116/286	40.6	36.9	30.6 – 40.9
<b>Close friend or relative died of HIV/AIDS</b>				
Yes, close relative	1/286	0.3	0.4	0.0 – 1.0
Yes, close friend	9/286	3.1	3.1	1.3 – 5.0
<b>Perception of personal</b>				
HIV risk				
No risk	169/358	47.2	44.6	38.8 – 48.7
Small risk	153/358	42.7	43.6	39.1 – 48.7
Moderate risk	18/358	5.0	6.0	4.0 – 8.6
High risk	3/358	0.8	0.8	0.1 – 1.6
Don't know	15/358	4.2	5.0	2.8 – 7.7
<b>Reasons for believing they are at risk of contracting HIV (among those who said they were at risk)</b>				
Many sexual partners	137/174	77.6	75.6	68.1 – 82.0
Didn't always use condoms	24/174	13.8	15.8	10.5 – 22.0
Injected drugs	0/174	-	-	-
Partner has other partners	15/174	8.6	8.7	4.4 – 13.0
<b>Reasons for believing they are not at risk of contracting HIV (among those who said they were not at risk) (multiple answers possible)</b>				
Trust my partner/s	147/169	87.0	86.2	80.4 – 91.3
Always use condoms	21/169	12.4	11.9	7.3 – 16.2
Don't know	4/169	2.4	3.3	0.0 – 7.3

### 9.3.18 Knowledge of HIV and AIDS

Knowledge amongst MSM in Anuradhapura is mixed, with scores on individual knowledge indicators varying from as low as 67.2% (can a person get HIV from sharing food with someone who is infected) to as high as 94.2% (risk of HIV infection can be reduced by having sex with one unfaithful partner, and a person can reduce the risk of HIV by using a condom every time they have sex) (Table 155). The overall knowledge level is low, with only just over half (52.4%) of MSM in Anuradhapura correctly identifying ways of preventing sexual transmission and rejecting major misconceptions about HIV transmission. However, more than three quarters (79.4%) of respondents did answer correctly that HIV can be transmitted from a mother to her unborn child and had ever heard of ART (83.9%).

**Table 155: Knowledge of HIV and AIDS, MSM Anuradhapura**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners</b> Yes	338/357	94.7	94.2	91.7 – 96.6
<b>Person can reduce the risk of getting HIV by using a condom every time he/she has sex</b> Yes	341/358	95.3	94.2	91.1 – 96.6
<b>Healthy-looking person can have HIV</b> Yes	337/358	94.1	93.7	91.1 – 96.1
<b>Person can get HIV from mosquito bites</b> No	252/357	70.6	68.5	63.0 – 72.7
<b>Person can get HIV by sharing food with someone who is infected</b> No	248/358	69.3	67.2	61.8 – 71.2
<b>Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission</b> Yes	200/356	56.2	52.4	46.3 – 56.3
<b>GARPR Knowledge Composite Indicator without GARPR (mosquito question)</b> Yes	230/357	64.4	62.1	56.6 – 66.1
<b>HIV can be transmitted from mother to her unborn child</b> Yes No Don't know	292/358 57/358 9/358	81.6 15.9 2.5	79.4 17.8 2.9	74.4 – 82.9 14.3 – 22.4 1.3 – 4.7
<b>Ever heard of ART</b> Yes	298/358	83.2	83.9	80.5 – 87.9

### 9.3.19 Stigma related to HIV and AIDS

Levels of stigma related to HIV and AIDS amongst MSM in Anuradhapura are low, with nearly all respondents indicating they would take care of an HIV positive family member (96.0%), agreeing that an HIV positive student should be allowed to go to school (88.0%), and would buy food from an HIV positive food seller (91.1%). However, nearly all (96.5%) respondents also agreed they would keep it confidential if a family member was HIV positive.

**Table 156: Stigma related to HIV and AIDS, MSM Anuradhapura**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Agrees to take care of an HIV positive family member at home</b> Yes	342/357	95.8	96.0	94.3 – 97.9
<b>Agrees that an HIV positive student should be allowed to continue attending a school</b> Yes	317/358	88.5	88.0	84.7 – 90.9
<b>Agrees to buy food from an HIV positive food seller</b> Yes	327/358	91.3	91.1	88.3 – 93.7
<b>Thinks that, if a family member becomes HIV positive, his/her HIV status should remain confidential</b> Yes	345/358	96.4	96.5	94.9 – 98.2

### 9.3.20 HIV testing

Nearly three quarters (71.2%) of MSM in Anuradhapura know where an HIV test can be obtained, but just over a quarter (28.8%) have actually been for a test and far fewer (8.6%) have been for a test in the last 12 months and received the result (Table 157). Most HIV testing has taken place at Government STD clinics (84.6%) and private clinics (9.1%), although a larger percentage compared with the other districts (7.4%) also visited Government non STD clinics (7.4%). The primary reasons for never getting an HIV test include 'not at risk for HIV' (45.6%) and 'don't know where to go' (25.2%). Most MSM in Anuradhapura believed their HIV status was negative (95.6%) or they are not sure (4.4%). They were generally satisfied with the services they received at their last HIV test (very satisfied: 71.5%; satisfied (25.1%). Just under three quarters (70.1%) of MSM in Anuradhapura told the provider they have sex with men at their last HIV test. The primary reason for not telling the provider is 'not necessary to discuss' (39.6%) and 'afraid provider would not keep confidential' (32.3%).

**Table 157: HIV testing, MSM Anuradhapura**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Knows where HIV testing can be obtained</b> Yes	261/358	72.9	71.2	66.3 – 74.9
<b>Ever tested for HIV</b> Yes	68/358	19.0	28.8	25.1 – 33.7
<b>The test was voluntary</b> Yes	64/68	94.1	93.6	88.5 – 98.4
<b>Site where last testing for HIV took place</b>				
Government STD Clinic	60/68	88.2	84.6	74.7 – 91.8
Government non-STD Clinic	4/68	5.9	7.4	1.7 – 14.1
Private Clinic	6/68	8.8	9.1	3.3 – 14.9
Private Pharmacy or Chemist	0/68	-	-	-
Don't know	1/68	1.5	2.6	0.0 – 7.1



Table 157: HIV testing, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for never getting an HIV test</b> (multiple answers possible)				
Don't know where to go	72/290	24.8	25.2	20.2 – 30.4
Always use condoms	30/290	10.3	8.8	5.5 – 10.9
Not at risk of getting HIV	129/290	44.5	45.6	40.1 – 51.8
Didn't have time/Too busy	15/290	5.2	4.1	2.1 – 5.4
I trust my partner	43/290	14.8	14.8	10.8 – 18.9
Afraid of knowing I may be HIV positive	8/290	2.8	3.3	1.5 – 5.4
Lack of confidentiality	4/290	1.4	1.6	0.4 – 3.1
Inconvenient testing location	21/290	7.2	6.9	4.4 – 9.3
No money	2/290	0.7	7.2	0.0 – 18.5
Other: No interest	1/290	0.3	0.2	0.0 – 0.6
<b>Time since last HIV test</b>				
≤ 1 year	35/68	51.5	48.1	32.1 – 61.2
> 1 year	33/68	48.4	51.9	38.7 – 67.8
<b>Knows result of last HIV test</b>				
Yes	68/68	100	100	-
<b>Tested for HIV in the past 12 months and knows result</b>				
Yes	35/358	9.8	8.6	5.6 – 10.8
<b>Reasons for the last HIV test</b> (multiple answers possible)				
Wanted to know my HIV status	64/68	94.1	94.5	90.1 – 99.0
My partner asked me to get tested	0/68	-	-	-
Wanted to start sexual relations with a new partner	1/68	1.5	1.1	0.0 – 2.4
Wanted to get married	0/68	-	-	-
Need for loan/insurance coverage	0/68	-	-	-
Employer requested the test	1/68	1.5	1.7	0.0 – 4.8
Felt sick	0/68	-	-	-
Advised by health worker	1/68	1.5	1.5	0.0 – 3.4
Advised by peer educator	1/68	1.5	1.3	0.0 – 3.1
<b>Result of last HIV test</b>				
HIV-negative	68/68	100	100	-
HIV-positive	0/68	-	-	-
Indeterminate	0/68	-	-	-
Did not get the result	0/68	-	-	-
<b>Perception of their current HIV status</b>				
HIV-negative	338/357	94.7	95.6	94.2 – 97.6
HIV-positive	0/357	-	-	-
Don't know	19/337	5.6	4.4	2.4 – 5.8
<b>Satisfaction with quality of services provided during last HIV testing</b>				
Very satisfied	48/67	71.6	71.5	56.2 – 86.8
Satisfied	16/67	23.9	25.1	10.2 – 40.9
A little satisfied	3/67	4.5	3.4	0.0 – 7.6
Not satisfied	0/67	-	-	-
<b>Told health care provider or counsellor that they have sex with men at last HIV testing</b>				
Yes	50/68	73.5	70.1	55.1 – 82.4

Table 157: HIV testing, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for not telling health care provider or counsellor they have sex with men</b> (multiple answers possible)				
Afraid of discrimination/Not providing testing	3/18	16.7	19.2	4.5 – 35.5
Afraid provider would tell police/legal authorities	0/18	-	-	-
It was not necessary to discuss	8/18	44.4	39.6	18.6 – 58.5
Afraid provider would not keep information confidential	6/18	33.3	32.3	14.0 – 49.8
Little or no contact/interaction with counsellor/provider Shy/Embarrassed	0/18	-	-	-
Provider already knew	2/18	11.1	13.7	0.0 – 29.0
	0/18	-	-	-
<b>Felt that health care provider or counsellor reacted in a negative or discriminatory way because they have sex with men</b>				
Yes	13/50	26.0	24.1	11.7 – 35.1
<b>Health care provider or counsellor's behaviour</b> (multiple answers possible)				
It was uncomfortable	13/13	100	100	-
Stopped talking to me	0/13	-	-	-
Asked me to leave	0/13	-	-	-
Verbally abused or scolded me	0/13	-	-	-

### 9.3.21 Experience of stigma, discrimination and violence

Very few MSM in Anuradhapura report cases stigma, discrimination and violence, with less than five percent reporting they had been refused healthcare (3.2%), police assistance (0.7%), receiving verbal insults (1.8%), or being physically assaulted (hit, kicked, beaten, etc.) (0.8%). Furthermore, there are no reports of sexual assault.

**Table 158: Experience of stigma, discrimination and violence**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Has been refused health care because someone believed they had sex with men</b> Yes	14/358	3.9	3.2	1.4 – 4.5
<b>Has been refused police assistance because someone believed they had sex with men</b> Yes	4/358	1.1	0.7	0.0 – 0.9
<b>Has been verbally insulted because someone believed they had sex with men</b> Yes	7/358	2.0	1.8	0.5 – 3.0
<b>Has been hit, kicked, or beaten because someone believed they had sex with men</b> Yes	5/358	1.4	0.8	0.1 – 1.1
<b>Has been sexually assaulted or raped</b> Yes	0/358	-	-	-

### 9.3.22 Health care utilization and pregnancy

Few MSM (8.7%) in Anuradhapura sought medical care for any reason in the last 12 months, amongst those who did, only one person reported any difficulty, being that it was too expensive (Table 159).

**Table 159: Health care utilization and pregnancy, MSM Anuradhapura**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Sought medical care for any reason during last 12 months</b> Yes	32/358	8.9	8.7	6.0 – 11.2
<b>Had difficulty getting medical care during last 12 months</b> Yes	1/32	3.1	2.1	0.0 – 4.0
<b>Type of difficulty</b> (multiple answers possible)				
Too expensive	1/1	100	100	-
Too far away	0/1	-	-	-
Could not take time from work	0/1	-	-	-
Long waiting times	0/1	-	-	-

### 9.3.23 Programme coverage

Just over ten percent (11.8%) of MSM in Anuradhapura have been in contact with a peer educator in the last six months, of those who did they were mostly in contact twice (66.7%) and received general HIV and STI information (92.1%). Less than a quarter (22.5%) of MSM in Anuradhapura meet the GARPR criteria for being reached by prevention programmes.

**Table 160: Programme coverage, MSM Anuradhapura**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Contact with a health peer educator in the community in the last 6 months</b>				
Yes	48/358	13.4	11.8	8.1 – 14.6
<b>Number of times of contact with a health peer educator in the last 6 months</b>				
1	2/48	4.2	3.4	0.0 – 6.7
2	32/48	66.7	6.8	55.6 – 81.9
≥ 3	10/48	20.8	16.7	3.8 – 25.8
Don't know	4/48	8.3	11.9	2.9 – 23.8
<b>Services or information received from the health peer educator</b> (multiple answers possible)				
General HIV/STI prevention/transmission information	46/48	95.8	92.1	82.7 – 98.8
Condoms	2/48	4.2	3.7	0.0 – 8.2
Referral for STI treatment	1/48	2.1	1.6	0.0 – 3.4
Referral for VCT	0/48	-	-	-
Medical visit	0/48	-	-	-
<b>Reached with HIV prevention programs</b> (received free condoms in the last 12 months and know where HIV testing can be obtained)				
Yes	82/355	22.9	22.5	18.1 – 26.5

### 9.3.24 Alcohol and drug use

While over three quarters (85.0%) of MSM in Anuradhapura have consumed alcohol in their lives, most (68.3%) had not had a drink in the last four weeks (Table 161). Few respondents (n=4) reported injecting drug use in the last 12 months. Of the four respondents who injected drugs in the last 12 months, two shared needles or syringes. The most commonly used drug in the past 12 months is cannabis (16.3%), followed by heroin (3.9%).

**Table 161: Alcohol and drug use, MSM Anuradhapura**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever consumed alcohol</b>				
Yes	305/358	85.2	85.0	81.7 – 88.3
<b>Alcohol consumption in the last 4 weeks</b>				
Never drink alcohol	2/305	0.7	0.9	0.0 – 2.0
Never in the last 4 weeks	200/305	65.6	68.3	63.9 – 74.4
Once a week	42/305	13.8	13.1	9.2 – 16.5
Less than once a week	25/305	8.2	70.2	4.3 – 9.0
Every day	33/305	10.8	9.7	6.5 – 12.4
Don't know	3/305	1.0	0.9	0.0 – 2.0
<b>Injected drugs in the last 12 months</b>				
Yes	4/358	1.1	1.3	0.0 – 2.8

Table 161: Alcohol and drug use, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Frequency of injecting drugs in the last 12 months</b>				
Once a month or less	3/4	75.0	88.2	79.5 – 100.0
2-4 times a month	1/4	25.0	11.8	0.0 – 20.5
2-3 times a week	0/4	-	-	-
≥ 4 times a week	0/4	-	-	-
<b>Type of drug injected most often</b>				
Heroin	1/3	33.3	44.4	26.1 – 96.9
Meth	1/3	33.3	23.4	0.0 – 39.1
Speedball (heroin + cocaine)	1/3	33.3	31.6	0.0 – 72.2
Shared needles/syringes				
Yes	2/4	50.0	65.5	20.9 – 100.0
<b>Heroin</b>				
Didn't use it in the last 6 months	2/356	0.6	0.7	0.0 – 2.1
Once a month or less	5/356	1.4	1.6	0.5 – 2.7
Several times a month	4/356	1.1	1.2	0.2 – 2.1
2-4 times a month	1/356	0.3	0.4	0.0 – 1.0
2-3 times a week	0/356	-	-	-
≥ 4 times a week	2/356	0.6	0.7	0.0 – 1.9
Have never used	342/356	96.1	95.4	93.0 – 97.4
<b>Canabis</b>				
Didn't use it in the last 6 months	1/358	0.3	0.1	- 0.2
Once a month or less	42/358	11.7	13.0	9.9 – 17.0
Several times a month	5/358	1.4	1.5	0.2 – 2.9
2-4 times a month	0/358	-	-	-
2-3 times a week	4/358	1.1	1.0	0.1 – 1.7
≥ 4 times a week	3/358	0.8	0.8	0.0 – 1.5
Have never used	303/358	84.6	83.6	79.4 – 87.1
<b>Cocaine</b>				
Didn't use it in the last 6 months	1/358	0.3	0.01	0.00 – 0.02
Once a month or less	0/358	-	-	-
Several times a month	0/358	-	-	-
2-4 times a month	0/358	-	-	-
2-3 times a week	0/358	-	-	-
≥ 4 times a week	0/358	-	-	-
Have never used	357/358	99.7	99.9	99.8 – 100.0
<b>Ecstasy</b>				
Didn't use it in the last 6 months	1/358	0.3	0.01	0.0 – 0.02
Once a month or less	0/358	-	-	-
Several times a month	0/358	-	-	-
2-4 times a month	0/358	-	-	-
2-3 times a week	0/358	-	-	-
≥ 4 times a week	1/358	0.3	0.02	0 – 0.5
Have never used	356/358	99.4	99.7	99.5 – 100.0

Table 161: Alcohol and drug use, MSM Anuradhapura (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Amphetamines</b>				
Didn't use it in the last 6 months	1/358	0.3	0.01	0.0 – 0.02
Once a month or less	0/358	-	-	-
Several times a month	0/358	-	-	-
2-4 times a month	0/358	-	-	-
2-3 times a week	0/358	-	-	-
≥ 4 times a week	0/358	-	-	-
Have never used	357/358	99.7	99.9	99.8 – 100
<b>Opium</b>				
Didn't use it in the last 6 months	0/357	-	-	-
Once a month or less	0/357	-	-	-
Several times a month	0/357	-	-	-
2-4 times a month	0/357	-	-	-
2-3 times a week	0/357	-	-	-
≥ 4 times a week	0/357	-	-	-
Have never used	357/357	100	100	-
<b>Hashish</b>				
Didn't use it in the last 6 months	0/358	-	-	-
Once a month or less	0/358	-	-	-
Several times a month	0/358	-	-	-
2-4 times a month	0/358	-	-	-
2-3 times a week	0/358	-	-	-
≥ 4 times a week	1/358	0.3	0.2	0.0 – 0.4
Have never used	357/358	99.7	99.8	99.6 – 100.0

### 9.3.25 Media usage

TV (82.2%), followed by radio (73.2%), and newspaper (58.3%) are the most commonly used media sources amongst MSM in Anuradhapura, with usage at least once a week, most days or every day (Table 162). Internet is not frequently used by MSM in Anuradhapura, with less than a quarter (15.0%) surfing the web at least once a week, most days or every. Similarly, few respondents (6.6%) use the internet to meet sexual partners. Most (91.2%) MSM in Anuradhapura have a mobile phone, use it to communicate with other MSM (79.0%), and would be interested in receiving health-related text messages (93.4%). Most (91.2%) respondents would also be interested in participating in learning activities.

**Table 162: Media usage, MSM Anuradhapura**

Characteristic	Sample proportions		Population estimates		
	n/N	%	%	95% CI	
<b>Radio</b>					
Never	82/358	22.9	25.4	21.4 – 31.0	
Once a month	4/358	1.1	1.2	0.2 – 2.3	
Once a week	4/358	1.1	0.7	0.1 – 1.1	
Most days	24/358	6.7	6.5	3.9 – 8.8	
Every day	243/358	67.9	66.0	60.5 – 70.3	
Don't know	1/358	0.3	0.2	0.0 – 0.4	
<b>TV</b>					
Never	51/358	14.2	15.8	12.2 – 20.4	
Once a month	5/358	1.4	1.3	0.2 – 2.3	
Once a week	5/358	1.4	1.4	0.3 – 2.4	
Most days	17/358	4.7	5.8	3.5 – 8.8	
Every day	277/358	77.4	75.0	69.7 – 78.9	
Don't know	3/358	0.8	0.7	0.0 – 1.2	
<b>Newspaper</b>					
Never	106/358	29.6	33.9	30.8 – 39.9	
Once a month	22/358	6.1	6.4	4.0 – 9.0	
Once a week	21/358	5.9	4.6	2.6 – 5.8	
Most days	13/358	3.6	3.3	1.5 – 4.7	
Every day	194/358	54.2	51.4	46.0 – 55.0	
Don't know	2/358	0.6	0.3	0.0 – 0.5	
<b>Internet</b>					
Never	284/358	79.6	80.7	77.4 – 84.9	
Once a month	16/358	4.5	4.3	2.4 – 6.0	
Once a week	11/358	3.1	3.1	1.4 – 4.7	
Most days	8/358	2.2	1.9	0.7 – 2.9	
Every day	38/358	10.6	10.0	7.0 – 12.5	
<b>Frequency of using the Internet to find sexual partners</b>					
Never	332/358	93.0	93.0	90.5 – 95.5	
Once a month	10/358	2.8	2.7	1.1 – 4.2	
Once a week	2/358	0.6	0.5	0.0 – 0.9	
Most days	1/358	0.3	0.1	0.0 – 0.4	
Every day	11/358	3.1	3.3	1.5 – 5.2	
Don't know	1/358	0.3	0.4	0.0 – 0.9	
<b>Has a mobile phone</b>	Yes	332/358	92.7	91.2	87.7 – 93.9
<b>Uses mobile phone to communicate with other MSM</b>	Yes	260/332	78.3	79.0	74.8 – 83.6
<b>Interested in receiving HIV and health-related text messages</b>	Yes	310/332	93.4	93.4	90.7 – 96.1
<b>Interested in attending learning activities</b>	Yes	329/358	91.9	91.2	88.1 – 93.8

### 9.3.26 Network size and multiplier questions

MSM in Anuradhapura estimate the average number of MSM living in Anuradhapura to be 1,084, of whom 981 are above the age of 18 (Table 163). With regard to multiplier questions, just under 10 percent (9.5%) have been treated at a Government STD clinic in 2014. The data presented in this table would ideally have been used by the NSACP to undertaken multiplier PSE; however, as previously mentioned data around catchment area was not available and therefore the multiplier calculations could not be undertaken.

**Table 163: Network and multiplier size questions, MSM Anuradhapura**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Estimation of the number of MSM who live in Anuradhapura</b>	356/358			
Mean	1216.4	-	1,083.7	-
SD	608.4	-	540.7	-
Mdn	1,000	-	925	-
Range	100 – 4,000	-	-	-
<b>Estimation of the number of MSM older than 18 who live in Anuradhapura</b>	353/358			
Mean	1,116.3	-	980.9	-
SD	563.7	-	483.5	-
Mdn	950	-	860	-
Range	150 – 3,800	-	-	-
<b>Number of MSM older than 18 seen in the last month (network size question)</b>	358/358			
Mean	8.54	-	5.02	-
SD	7.9	-	3.29	-
Mdn	6	-	3	-
Range	2 – 100	-	-	-
<b>Treated at Government STD (NSACP) clinic in 2014</b>				
Yes	38/358	10.6	9.5	0.0 – 11.9
<b>NSCAP clinics visited in 2014<sup>92</sup></b>				
Anuradhapura STD clinic	25/358	7.0	5.8	3.4 – 7.4

### 9.4 MSM Aggregate data

In total, 1,217 MSM were surveyed across three districts as follows, 504 in Colombo, 355 in Galle, and 358 in Anuradhapura (Table 164). Overall, the HIV prevalence amongst MSM in Colombo, Galle and Anuradhapura is just under one percent (0.88%), and the active syphilis prevalence is just over one and a half percent (1.66%). All GARPR indicators are low, with only just over half of MSM (57.94%) across all districts having used a condom at last anal sex. Furthermore, composite knowledge around HIV at 30.46%, testing in the last 12 months and received the result at 15.42% and composite prevention programmes indicator at 19.3%. It is important to note that the three RDS surveys comprise distinct populations; hence aggregate data is only provided for key variables of interest. These aggregates should be interpreted as averages, which have accounted for differences in populations sizes. As Colombo has the highest estimates it has the largest weight and influences the overall estimate the most. The mean populations estimate across the three districts is 5,976, broken down as 3.991 in Colombo, and 1.078 in Galle, and 907 in Anuradhapura.

<sup>92</sup> 36 of 55 (65.5%) who said that were treated in the Government STD clinic provided name of the clinic, month and year, 11 of those 36 tested before 2014.



**Table 164: MSM aggregate IBBS data from Colombo, Galle and Anuradhapura**

Characteristic	Overall prevalence/frequency estimate		
	%	SE*	95% CI**
<b>HIV (Colombo and Galle)***</b>	1.03	0.0043	0.2 – 1.9
<b>HIV (All)***</b>	0.88	-	-
<b>Syphilis – Active (Colombo and Galle)***</b>	1.96	0.0083	0.3 – 3.6
<b>Syphilis (All)***</b>	1.66	-	-
<b>Composite knowledge</b>	30.46	0.0162	27.3 – 33.6
<b>Used a condom at last anal sex</b>	57.94	0.0197	54.1 – 61.8
<b>Tested for HIV in the past 12 months and knows result</b>	15.42	0.0169	12.1 – 18.7
<b>Reached with HIV prevention programs (received free condoms and know where HIV testing can be obtained)</b>	19.29	0.0177	15.8 – 22.8

\*Standard Error (SE)

\*\*SE and confidence intervals do not account for variability in population size estimates, making them narrower than they should be.

\*\*\* Only Colombo and Galle (Total population = 5,069) can have standard error and confidence intervals calculated, as there were no HIV and active syphilis cases in Anuradhapura sample. Current methods cannot calculate confidence intervals when all participants belong to a single group (in this case, all are HIV and syphilis negative in Anuradhapura).

## 9.5 MSM multivariate analysis

Using a logistic regression analysis, comparison of factors associated with outcomes was undertaken: using a condom at last sex, having an HIV test in the past 12 months and knowing the results, and reached with prevention programs. The variables used as correlates are presented in the tables. Individualized RDS weights for bivariate (unadjusted OR) and multivariate (adjusted OR) were exported from RDS-Analyst using a Gile'sSS estimator. Proportions (n/N) and percentage (%) among groups is shown without RDS weights. Cases with missing values were excluded from the analysis.

### 9.5.1 MSM Colombo

Amongst MSM in Colombo, having an HIV test in the last 12 months is most associated with receiving a condom from NGO or a health care centre (AOR 7.53). Furthermore, MSM who had sex with women have lower odds of having had an HIV test in the last 12 months and received the result (AOR 0.43).

**Table 165: Factors associated with having an HIV test in the last 12 months, and knowing the result, MSM Colombo**

	HIV test in the past 12 months		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	116/504	23.0		
<b>Age</b>				
18 – 24	26/145	17.9	1.0	1.0
25 – 34	34/136	25.0	1.40** (1.12 – 1.76)	1.19 (0.86 – 1.63)
35 – 44	27/121	22.3	1.35* (1.07 – 1.71)	1.00 (0.72 – 1.42)
≥ 45	29/102	28.4	3.04*** (2.44 – 3.78)	2.88*** (2.07 – 4.00)
<b>Level of education</b>				
≤ Grade 10	58/289	20.1	1.0	1.0
≥ Passed O/L	57/210	27.1	1.41*** (1.20 – 1.65)	0.77* (0.6 – 0.997)
<b>Monthly income</b>				
≤20.000	53/188	28.2	1.0	1.0
>20.000	60/296	20.3	0.79** (0.67 – 0.93)	0.86 (0.68 – 1.08)
<b>Number of all sexual partners in the last 6 months</b>				
1	18/64	28.1	1.0	1.0
2	13/82	15.9	0.38*** (0.29 – 0.51)	0.91 (0.61 – 1.36)
3 – 5	18/99	18.2	0.44*** (0.34 – 0.58)	0.64* (0.43 – 0.95)
6 or more	67/259	25.9	0.81 (0.65 – 1.01)	0.45*** (0.32 – 0.63)
<b>Had sex with women in the last 12 months</b>	35/297	11.8	0.21*** (0.18 – 0.25)	0.43*** (0.34 – 0.55)
<b>Composite GARPR knowledge (all correct)</b>	64/167	38.3	3.40*** (3.15 – 4.35)	2.81*** (2.24 – 3.53)
<b>Received free condoms from NGOs or a health care center in the last 12 months</b>	84/157	53.5	16.53*** (13.64 – 20.01)	7.53*** (5.86 – 9.67)
<b>Contact with a health peer educator in the community in the last 6 months</b>	54/75	72.0	16.13*** (13.17 – 19.76)	3.86*** (2.90 – 5.14)
<b>Condom used at last anal sex</b>	98/326	30.1	4.75*** (3.79 – 5.94)	1.62** (1.21 – 2.18)

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

Independent factors associated with condom use at last anal sex amongst MSM in Colombo include contact with a peer educator in the last 12 months (AOR 6.18), having passed O/L (AOR 2.85), and composite HIV knowledge (AOR 2.46).

**Table 166: Factors associated with condom use at last anal sex, MSM Colombo**

	Condom used at last anal sex		Unadjusted OR (95% CI)	Adjusted OR (95% CI)
	n/N	%		
<b>Total</b>	326/487	66.9	-	-
<b>Age</b>				
18 – 24	91/140	65.0	1.0	1.0
25 – 34	97/131	74.0	1.38** (1.15 – 1.65)	1.43** (1.14 – 1.79)
35 – 44	72/115	62.6	0.75** (0.63 – 0.90)	0.71** (0.57 – 0.89)
≥ 45	66/101	65.3	1.03 (0.85 – 1.24)	0.95 (0.75 – 1.21)
<b>Level of education</b>				
≤ Grade 10	169/284	59.5	1.0	1.0
≥ Passed O/L	153/198	77.3	2.64*** (2.29 – 3.04)	2.85*** (2.38 – 3.42)
<b>Monthly income</b>				
≤20,000	118/184	64.1	1.0	1.0
>20,000	195/283	68.9	1.08 (0.94 – 1.24)	1.32** (1.12 – 1.57)
<b>Number of all sexual partners in the last 6 months</b>				
1	39/62	62.9	1.0	1.0
2	41/79	51.9	0.54*** (0.43 – 0.68)	0.70* (0.52 – 0.94)
3 – 5	56/92	60.9	1.12 (0.89 – 1.42)	1.29 (0.95 – 1.74)
6 or more	190/254	74.8	1.38** (1.12 – 1.69)	1.40* (1.06 – 1.85)
<b>Had sex with women in the last 12 months</b>	169/283	59.7	0.41*** (0.36 – 0.47)	0.59*** (0.50 – 0.71)
<b>Composite GARPR knowledge (all correct)</b>	129/163	79.1	3.50*** (2.96 – 4.14)	2.46*** (2.01 – 3.02)
<b>Received free condoms from NGOs or a health care center in the last 12 months</b>	133/154	86.4	5.25*** (4.32 – 6.38)	1.86*** (1.45 – 2.37)
<b>Contact with a health peer educator in the community in the last 6 months</b>	70/73	95.9	24.38*** (14.7 – 40.2)	6.18*** (3.59 – 10.65)
<b>HIV test in the last 12 months and knows the result</b>	98/113	86.7	4.75*** (3.79 – 5.94)	1.45* (1.07 – 1.98)

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

Amongst MSM in Colombo, independent factors associated with prevention programme reach include passing O/Levels (AOR 2.56) and older ages (aged 45 or older: AOR 2.33 and aged 25-34: AOR 2.65). Having had only two sexual partners in the last six months (AOR 0.43) and six or more (AOR 0.59) have lower odds of being reached with prevention program.

**Table 167: Factors associated with prevention programmes reach (been given condoms in last 12 months and know where to go for an HIV test), MSM Colombo**

	Reached by prevention program		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	120/504	23.8		
<b>Age</b>				
18 – 24	29/145	20.0	1.0	1.0
25 – 34	36/136	26.5	1.26* (1.02 – 1.56)	2.0*** (1.56 – 2.56)
35 – 44	33/121	27.3	1.49*** (1.20 – 1.85)	2.65*** (2.05 – 3.44)
≥ 45	22/102	21.6	1.86*** (1.50 – 2.30)	2.33*** (1.80 – 3.02)
<b>Level of education</b>				
≤ Grade 10	56/289	19.4	1.0	1.0
≥ Passed O/L	62/210	29.5	1.83*** (1.57 – 2.13)	2.56*** (2.12 – 3.08)
<b>Monthly income</b>				
≤20,000	54/188	28.7	1.0	1.0
>20,000	60/296	20.3	0.76** (0.65 – 0.90)	0.70*** (0.58 – 0.83)
<b>Number of all sexual partners in the last 6 months</b>				
1	18/64	28.1	1.0	1.0
2	9/82	11.0	0.25*** (0.18 – 0.34)	0.43*** (0.31 – 0.61)
3 – 5	18/99	18.2	0.43*** (0.33 – 0.56)	0.59** (0.43 – 0.80)
6 or more	75/259	29.0	0.96 (0.77 – 1.19)	1.18 (0.91 – 1.52)
<b>Had sex with women in the last 12 months</b>	38/297	12.8	0.21*** (0.18 – 0.24)	0.22*** (0.18 – 0.26)

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

### 9.5.2 MSM Galle

Contact with a peer educator in the last six months (AOR 29.68), a monthly income of over 20,000 rupees (AOR 13.73), and receiving free condoms (AOR 11.08) are associated with having had an HIV test in the last 12 months and knowing the result.

**Table 168: Factors associated with having had an HIV test in the past 12 months and knowing the result,**

	HIV test in the past 12 months		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	20/355	5.6	-	-
<b>Age</b>				
<25	15/267	5.6	1.0	-
≥25	5/88	5.7	0.99 (0.53 – 1.85)	-
<b>Level of education</b>				
≤ Grade 10	6/148	4.1	1.0	-
≥ Passed O/L	14/207	6.8	1.59 (0.90 – 2.80)	-

Table 168: Factors associated with having had an HIV test in the past 12 months and knowing the result, (Continued)

	HIV test in the past 12 months		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Number of all sexual partners in the last 6 months</b>				
1	2/10	20.0	1.0	1.0
2	2/16	12.5	0.68 (0.21 – 2.29)	0.004*** (0.0 – 0.057)
3 – 5	5/61	8.2	0.30* (0.10 – 0.92)	0.014*** (0.002 – 0.11)
6 or more	11/268	4.1	0.12*** (0.05 – 0.34)	0.018*** (0.003 – 0.11)
<b>Had sex with women in the last 12 months</b>	12/199	6.0	1.42 (0.81 – 2.49)	-
<b>Composite GARPR knowledge (all correct)</b>	4/58	6.9	1.29 (0.64 – 2.61)	-
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>	15/72	20.8	15.0*** (7.96 – 28.27)	11.08*** (4.06 – 30.23)
<b>Contact with a health peer educator in the community in the last 6 months</b>	11/34	32.4	21.83*** (12.10 – 39.40)	29.68*** (10.25 – 85.90)
<b>Condom used at last anal sex</b>	14/133	10.5	5.59*** (3.01 – 10.37)	1.96 (0.76 – 5.01)

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

Note: Age was dichotomized, as there was a group without an outcome. Additionally, as the outcome was rare (n=20), only correlates shown as significant in bivariate analysis were included in the logistic regression model. Interpret these results with caution.

Amongst MSM in Galle, having had an HIV test in the last 12 months and receiving the result (AOR: 3.89), receiving free condoms in the last 12 months (AOR 3.4), and aged 25-34 (OR 2.67) are associated with condom use at last anal sex. MSM with higher levels of education (O/Levels: OR 0.53) and higher monthly income (over 20,000 rupees: OR 0.53) have lower odds of condom use at last anal sex.

Table 169: Factors associated with condom use at last anal sex, MSM Galle

	Condom used at last anal sex		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	133/352	37.8		
<b>Age</b>				
18 – 24	91/264	34.5	1.0	1.0
25 – 34	32/66	48.5	1.69** (1.22 – 2.34)	2.67*** (1.76 – 4.04)
35 – 44	6/12	50.0	2.15* (1.16 – 4.00)	2.02 (0.96 – 4.25)
≥ 45	4/10	40.0	1.42 (0.74 – 2.75)	1.99 (0.88 – 4.48)

Table 169: Factors associated with condom use at last anal sex, MSM Galle (Continued)

	Condom used at last anal sex		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Level of education</b>				
≤ Grade 10	60/148	40.5	1.0	1.0
≥ Passed O/L	73/204	35.8	0.84 (0.65 – 1.07)	0.53*** (0.37 – 0.74)
<b>Monthly income</b>				
≤20.000	53/138	38.4	1.0	1.0
>20.000	43/116	37.1	0.77 (0.57- 1.04)	0.53** (0.36 – 0.76)
<b>Number of all sexual partners in the last 6 months</b>				
1	4/9	44.4	1.0	1.0
2	6/15	40.0	1.65 (0.60 – 4.53)	2.97 (0.45 – 19.78)
3 – 5	18/60	30.0	0.66 (0.27 – 1.65)	3.40 (0.57 – 20.25)
6 or more	105/268	39.2	0.80 (0.34 – 1.88)	3.42 (0.60 – 19.40)
<b>Had sex with women in the last 12 months</b>	71/196	36.2	0.90 (0.70 – 1.16)	0.71 (0.49 – 1.02)
<b>Composite GARP knowledge (all correct)</b>	28/57	49.1	1.99*** (1.41 – 2.8)	1.64 (1.02 – 2.65)
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>	45/70	64.3	4.24*** (3.03 – 5.94)	3.4*** (2.19 – 5.31)
<b>Contact with a health peer educator in the community in the last 6 months</b>	19/33	57.6	2.23*** (1.43 – 3.48)	0.96 (0.46 – 2.02)
<b>HIV test in the last 12 months and knows the result</b>	14/20	70.0	5.59*** (3.01 – 10.37)	3.89** (1.52 – 9.94)

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

Amongst MSM in Anuradhapura, the only factor significantly associated with prevention programme reach is having passed O/Levels (AOR 2.62). However, factors negatively associated include having has 6 or more sexual partners in the last 6 months (AOR 0.08) and 3-5 sexual partners in the last 6 months (AOR 0.15).

**Table 170: Factors associated with prevention programme reach (been given condoms in the last 12 months and knowing where to go for an HIV test)**

	Reached by prevention program		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	41/355	11.5	-	-
<b>Age</b>				
18 – 24	30/267	11.2	1.0	1.0
25 – 34	8/66	12.1	0.90 (0.51 – 1.57)	1.29 (0.59 – 2.14)
35 – 44	2/12	16.7	2.59* (1.21 – 5.56)	2.50 (0.99 – 6.33)
≥ 45	1/10	10.0	0.83 (0.26 – 2.69)	1.36 (0.38 – 4.79)
<b>Level of education</b>				
≤ Grade 10	11/148	7.4	1.0	1.0
≥ Passed O/L	30/207	14.5	2.32*** (1.49 – 3.60)	2.62** (1.46 – 4.7)
<b>Monthly income</b>				
≤20.000	12/138	8.7	1.0	1.0
>20.000	16/118	13.6	1.75* (1.06 – 2.86)	1.28 (0.75 – 2.20)
<b>Number of all sexual partners in the last 6 months</b>				
1	3/10	30.0	1.0	1.0
2	5/16	31.2	1.53 (0.56 – 4.20)	0.30 (0.06 – 1.37)
3 – 5	7/61	11.5	0.26** (0.10 – 0.71)	0.15* (0.04 – 0.63)
6 or more	26/268	9.7	0.17*** (0.07 – 0.42)	0.08*** (0.21 – 0.30)
<b>Had sex with women in the last 12 months</b>	23/199	11.6	0.94 (0.63 – 1.41)	0.64 (0.37 – 1.12)

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

### 9.5.3 MSM Anuradhapura

Independent factors associated with HIV testing amongst MSM in Anuradhapura include contact with a peer educator (AOR 9.38), having passed O/Levels (AOR 5.35), and having sex with a woman in the last 12 months (AOR 3.11). MSM aged 25-34 (AOR 0.18) have lower odds of testing.

**Table 171: Factors associated with having had an HIV test in the past 12 months and knowing the result, MSM Anuradhapura**

	HIV test in the past 12 months		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	35/358	9.8	-	-
<b>Age</b>				
18 – 24	14/159	8.8	1.0	1.0
25 – 34	7/91	7.7	0.78 (0.40 – 1.52)	0.18*** (0.07 – 0.47)
35 – 44	10/61	16.4	2.28** (1.29 – 4.03)	0.49 (0.21 – 1.16)
≥ 45	4/45	8.9	1.18 (0.56 – 2.49)	1.80 (0.65 – 4.99)
<b>Level of education</b>				
≤ Grade 10	3/91	3.3	1.0	1.0
≥ Passed O/L	32/267	12.0	6.71*** (2.68 – 16.80)	5.35** (1.77 – 16.23)

Table 171: Factors associated with having had an HIV test in the past 12 months and knowing the result, MSM Anuradhapura (Continued)

	HIV test in the past 12 months		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Monthly income</b>				
≤20.000	10/144	6.9	1.0	1.0
>20.000	24/192	12.5	2.26** (1.34 – 3.81)	0.96 (0.49 – 1.92)
<b>Number of all sexual partners in the last 6 months</b>				
1	4/49	10.2	1.0	1.0
2	9/60	15.0	1.93 (0.91 – 4.10)	2.87* (1.06 – 7.76)
3 – 5	6/74	8.1	0.61 (0.26 – 1.47)	1.0 (0.34 – 2.95)
6 or more	15/175	8.6	0.59 (0.28 – 1.23)	2.10 (0.77 – 5.8)
<b>Had sex with women in the last 12 months</b>	33/327	10.1	1.69 (0.62 – 4.63)	3.11 (0.86 – 11.31)
<b>Composite GARP knowledge (all correct)</b>	25/200	12.5	2.41** (1.45 – 4.01)	1.83 (0.93 – 3.59)
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>	26/113	23.0	8.22*** (4.79 – 14.1)	3.10** (1.45 – 6.61)
<b>Contact with a health peer educator in the community in the last 6 months</b>	19/48	39.6	14.27*** (8.54 – 23.84)	9.38*** (4.41 – 19.97)
<b>Condom used at last anal sex</b>	31/190	16.3	7.38*** (3.62 – 15.04)	3.34** (1.44 – 7.75)

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

Amongst MSM in Anuradhapura independent factors associated with condom use at last anal sex include receiving free condoms in the last 12 months (AOR 7.99), having had an HIV test in the last 12 months and received the result (AOR 3.04) and a monthly income over 20,000 rupees a month (AOR 1.76). MSM who reported having had sex with women in the last 12 months had lower odds of condom use (AOR 0.36).



**Table 172: Factors associated with condom use at last anal sex, MSM Anuradhapura**

	Condom used at last anal sex		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	190/328	57.9		
<b>Age</b>				
18 – 24	78/149	52.3	1.0	1.0
25 – 34	53/80	66.2	2.10*** (1.48 – 3.00)	1.06 (0.67 – 1.66)
35 – 44	36/57	63.2	1.84** (1.24 – 2.73)	1.10 (0.68 – 1.80)
≥ 45	22/41	53.7	1.06 (0.69 – 1.63)	0.92 (0.53 – 1.59)
<b>Level of education</b>				
≤ Grade 10	41/84	48.8	1.0	1.0
≥ Passed O/L	149/244	61.1	1.67** (1.24 – 2.26)	1.12 (0.78 – 1.61)
<b>Monthly income</b>				
≤20.000	66/131	50.4	1.0	1.0
>20.000	114/176	64.8	1.99*** (1.50 – 2.65)	1.76** (1.23 – 2.53)
<b>Number of all sexual partners in the last 6 months</b>				
1	31/46	67.4	1.0	1.0
2	36/53	67.9	1.19 (0.70 – 2.03)	1.41 (0.71 – 2.79)
3 – 5	34/64	53.1	0.69 (0.41 – 1.14)	1.08 (0.57 – 2.04)
6 or more	89/165	53.9	0.66 (0.42 – 1.02)	1.69 (0.95 – 3.01)
<b>Had sex with women in the last 12 months</b>	168/298	56.4	0.53* (0.32 – 0.88)	0.36** (0.20 – 0.67)
<b>Composite GARP knowledge (all correct)</b>	115/187	61.5	1.50** (1.14 – 1.97)	1.12 (0.79 – 1.58)
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>	96/111	86.5	9.36*** (6.38 – 13.73)	7.99*** (5.16 – 12.39)
<b>Contact with a health peer educator in the community in the last 6 months</b>	41/48	85.4	4.69*** (2.78 – 7.90)	1.16 (0.59 – 2.27)
<b>HIV test in the last 12 months and knows the result</b>	31/35	88.6	7.38*** (3.62 – 15.04)	3.04** (1.34 – 6.88)

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

Independent factors associated with prevention programme reach include higher education (passed O Levels: AOR 2.6), and aged 25-34 (AOR 1.63). MSM who had 6 or more sexual partners in the last six months have lower odds of being reached (AOR 0.48).

**Table 173: Factors associated with prevention programme reach (been given condoms in past 12 months and know where to go for an HIV test), MSM Anuradhapura**

	Reached by prevention program		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	82/358	22.9	-	-
<b>Age</b>				
18 – 24	32/159	20.1	1.0	1.0
25 – 34	29/91	31.9	2.54*** (1.75 – 3.69)	1.63* (1.07 – 2.48)
35 – 44	14/61	23.0	1.35 (0.86 – 2.13)	0.85 (0.51 – 1.40)
≥ 45	7/45	15.6	0.88 (0.50 – 1.54)	0.73 (0.40 – 1.35)
<b>Level of education</b>				
≤ Grade 10	11/91	12.1	1.0	1.0
≥ Passed O/L	71/267	26.6	3.07*** (2.01 – 4.86)	2.6*** (1.66 – 4.07)
<b>Monthly income</b>				
≤20.000	30/144	20.8	1.0	1.0
>20.000	51/192	26.6	1.81*** (1.30 – 2.53)	1.42 (0.97 – 2.06)
<b>Number of all sexual partners in the last 6 months</b>				
1	17/49	34.7	1.0	1.0
2	20/60	33.3	1.24 (0.73 – 2.1)	1.08 (0.61 – 1.91)
3 – 5	19/74	25.7	0.78 (0.46 – 1.32)	0.91 (0.51 – 1.59)
6 or more	26/175	14.9	0.39*** (0.24 – 0.63)	0.48** (0.29 – 0.81)
<b>Had sex with women in the last 12 months</b>	76/327	23.2	1.2 (0.67 – 2.14)	1.08 (0.58 – 2.01)

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001



# People who Inject Drugs



## 10. People who inject drugs

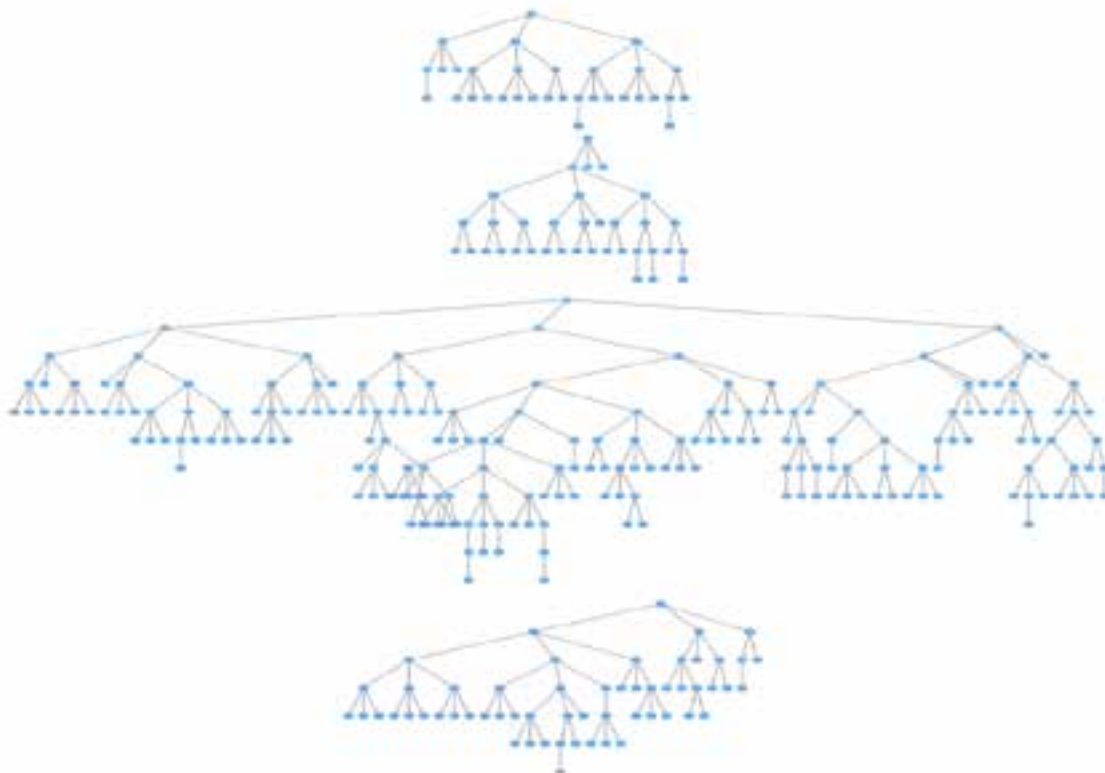
A total of 326 PWID were recruited in Colombo, including four seeds. Seeds were recruited based on contacts with NGOs, and from the FA. The same estimator in RDS-A was used as with the previous populations, Gile's SS with an entered population size estimate of 2.935 (low of 326 and high of 5.544), 0.95 confidence interval and 5000 bootstraps.

### 10.1 PWID Colombo

#### 10.1.1 Network properties

While there were four seeds, most of the recruitment came from one seed, as illustrated in Figure 22. As network size data was only available for 106/326 respondents (32.5%) of the population, missing data was imputed with the median value of 8. This level of imputation has significant effects on the population estimates, which should therefore be interpreted with caution.

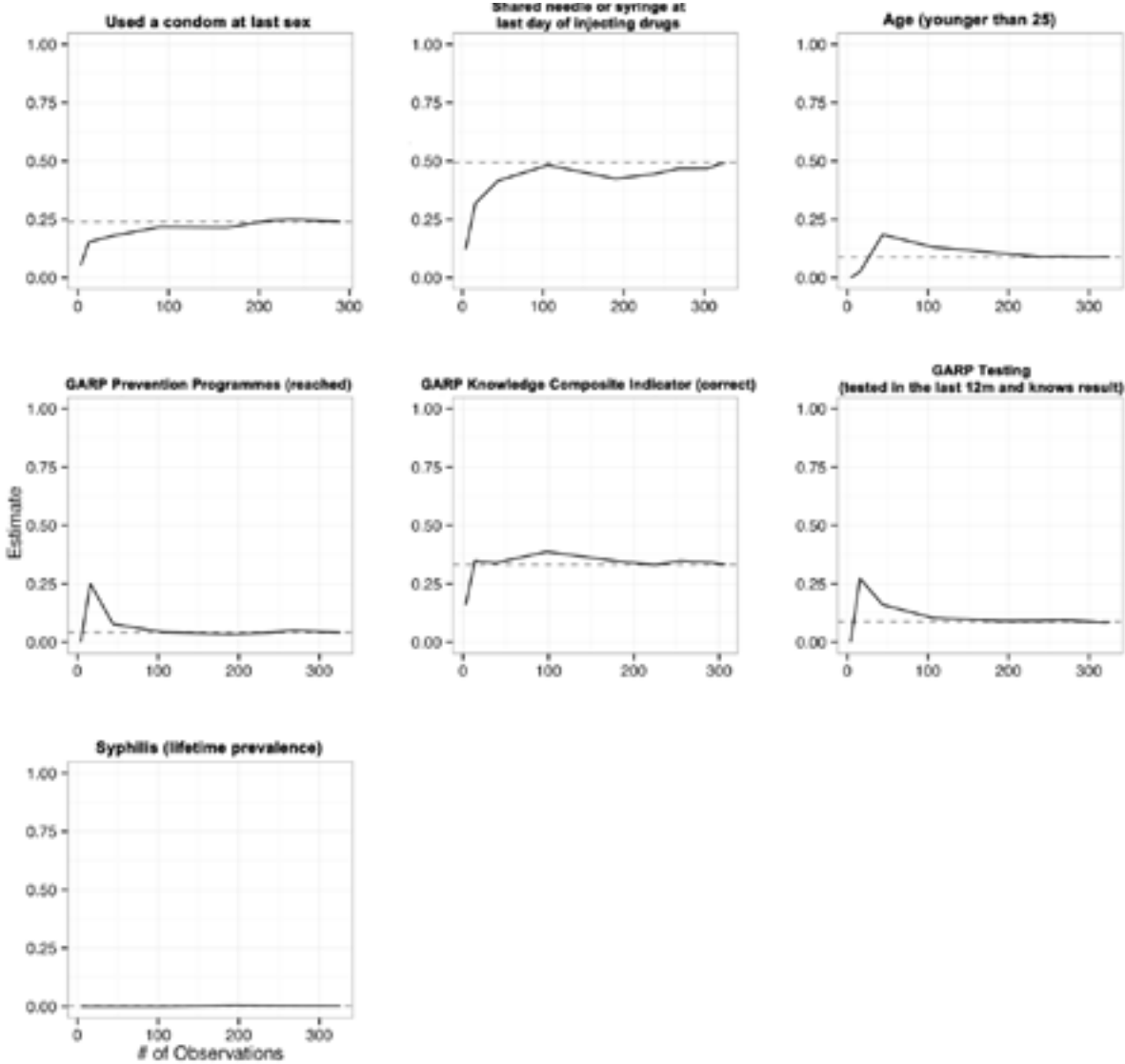
**Figure 22: Recruitment tree, PWID Colombo**



#### 10.1.2 Convergence

Convergence was reached on 7 of 8 key indicators (Figure 23). Sharing needle or syringe at last injection is borderline converging. As the converging line is close to the population estimates for that indicator and the sample size has been reached, this slight deviation does not have an impact on the interpretation of results.

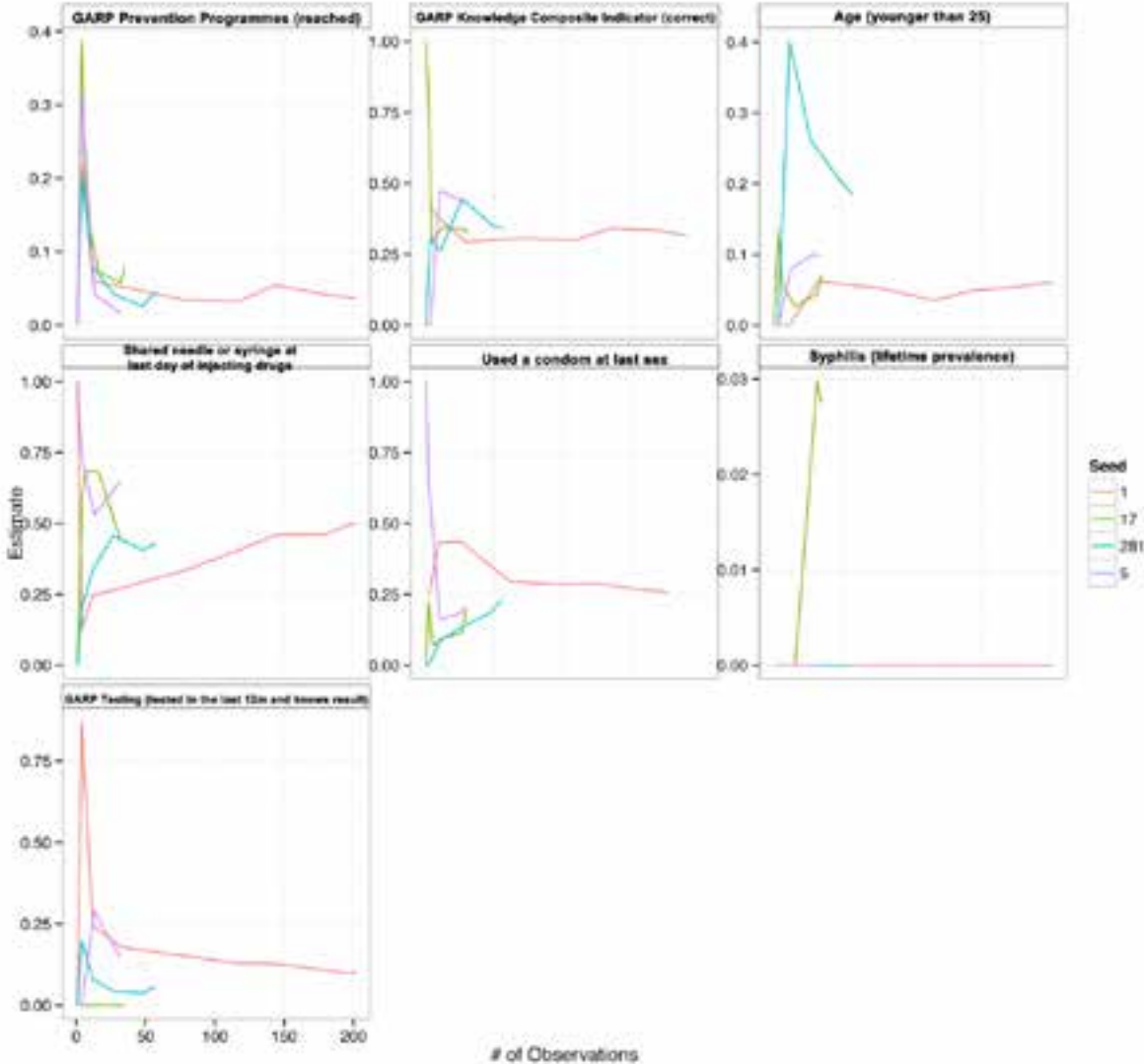
**Figure 23: Convergence on key indicators, PWID Colombo**



**10.1.3 Bottleneck plots**

There is no evidence of bottlenecks in the PWID Colombo data. Most recruitment is coming from a single seed; this makes bottleneck graphs not useful for diagnostics (Figure 24).

**Figure 24: Bottleneck Plots, PWID Colombo**



**10.1.4 Homophily**

Amongst PWID in Colombo, homophily ranges between 1.04 and 1.14, which is within acceptable ranges, indicating minimal bias in recruitment to recruit those similar to oneself (Table 174).

**Table 174: Homophily, PWID Colombo**

Indicator	Recruitment homophily	Estimated population homophily
HIV	-	-
Active syphilis	-	-
Condom used with last sexual partner	1.05	1.04
Received free condoms from NGOs or a health care centre in the last 12 months and know where to obtain an HIV test	0.99	1.08

Table 174: Homophily, PWID Colombo (Continued)

Indicator	Recruitment homophily	Estimated population homophily
Correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	1.05 <sup>*</sup>	1.14
Tested for HIV in the past 12 months and knows result	0.99	1.07
Shared needle or syringe at last day of injecting drugs	1.04	1.04

### 10.1.5 Study and recruiter information

The main reason for participation in the survey amongst PWID in Colombo was for the HIV test (77.6%) and an interest in issues relating to PWID (14.1%) (Table 175). All respondents received the coupon from a friend/acquaintance and most had known this person for over a year (81.7%). The screener was confident that all respondents were genuine member of the target population, in other words true IDU.

Table 175: Study and recruiter information, PWID Colombo

Characteristic	Sample proportions	
	n/N	%
<b>Main reason for participation in the study</b>		
Interest in HIV and sexual health	10/326	3.1
HIV test	253/326	77.6
Interest in issues related to PWID	46/326	14.1
Helping the community	6/326	1.8
Friend wanted me to participate	11/326	3.4
Someone forced me	0/326	-
Incentive/Gift	0/326	-
<b>Mode of receiving the coupon</b>		
From a friend/acquaintance	322/322 <sup>93</sup>	100.0
Found it	0/322	-
Bought it/Exchanged it for something	0/322	-
<b>Length of time they knew the person who gave them the coupon</b>		
< 6 months	12/322	3.7
6 months – 1 year	47/322	14.6
> 1 year	263/322	81.7
<b>Screener's confidence that participant is PWID</b>		
Confident	326/326	100
Somewhat confident	0/326	-
Not confident	0/326	-

### 10.1.6 Biological test results

There were no cases of HIV or active syphilis amongst PWID, resulting in zero percent prevalence (Table 176). However, there was one non active (lifetime prevalence) case of syphilis resulting in a 0.3% prevalence for non active syphilis.

<sup>93</sup> Seeds not included as these coupons were purposefully distributed by the IBBS survey team



**Table 176: Biological test results, PWID Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>HIV</b>	0/326	-	-	-
<b>Syphilis - Active</b>	0/326	-	-	-
<b>Syphilis - Non-Active</b>	1/326	0.3	0.3	0.0 – 0.7
<b>Syphilis - Total (active and non-active)</b>	1/326	0.3	0.3	0.0 – 0.7

### 10.1.7 Socio-demographic characteristics

The average age of PWID in Colombo is 40.2, with less than ten percent (8.9%) aged under 25 (Table 177). Most PWID in Colombo are male (98.0%), with same sex as at birth (99.7%), born in Sri Lanka (100.0%), and Sinhalese (77.7%). Nearly all PWID have their residence in Colombo and have lived there for one year or more (99.7%). Sinhalese is the primary language spoken at home (89.5%), and over three quarters of PWID are literate with most having passed O/Levels (74.3%). The average personal income is between 10,001 rupees and 40,000 rupees a month (81.2%), which typically supports one to thirty two more persons, with most PWID supporting one other person (33.7%). The most typical occupation is street vendor/casual labourer (52.2%) and factory worker (23.3%).

**Table 177: Socio-demographic characteristics, PWID Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Age</b>				
Mean	40.2	-	40.2	-
SD	10.8	-	11.0	-
Median	40.0	-	40.0	-
Range	18-66	-	-	-
<b>Age groups</b>				
Aged under 20	5/326	1.5	2.4	0.1 – 4.8
Aged under 25	28/326	8.6	8.9	5.6 – 12.3
18 – 24	28/326	8.6	8.0	5.6 – 12.3
25 – 34	80/326	24.5	24.4	19.8 – 29.0
35 – 44	92/326	28.2	27.7	22.6 – 32.7
≥ 45	126/326	38.7	39.0	33.5 – 44.6
<b>Sex</b>				
Female	7/326	2.1	2.0	0.5 – 3.5
Male	319/326	97.9	98.0	96.5 – 99.5
<b>Sex same as at birth</b>				
Yes	325/326	99.7	99.7	99.3 – 100.0
<b>Citizenship</b>				
Sri Lankan	326/326	100	100	-
Other	0/326	-	-	-
<b>Country of birth</b>				
Sri Lanka	326/326	100	100	-
Other	0/326	-	-	-

Table 177: Socio-demographic characteristics, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ethnicity</b>				
Sinhalese	248/325	76.3	77.7	72.2 – 89.4
Sri Lankan Tamil	38/325	11.7	10.9	6.9 – 14.7
Indian Tamil	0/325	-	-	-
Moor	14/325	4.3	4.0	2.1 – 5.9
Burgher / Malay	2/325	0.6	0.6	0.0 – 1.3
Other: Muslim/Islam	5/325	1.5	1.4	0.2 – 2.7
Not Specified	18/325	5.5	5.5	2.8 – 8.1
<b>District of residence during the past one year</b>				
Colombo	235/326	99.7	99.7	99.3 – 100.0
Other	1/326 <sup>94</sup>	0.3	0.3	0.0 – 0.7
<b>Length of time lived in Colombo</b>				
< 1 year	1/326	0.3	0.3	- 0.7
≥ 1 year	325/326	99.7	99.7	99.3 – 100.0
<b>Primary residence</b>				
Colombo	324/326	99.4	99.4	98.6 – 100.0
Other	2/326 <sup>95</sup>	0.6	0.6	0.0 – 1.4
<b>Language spoken at home</b> (Bi-Lingual Possible)				
Sinhalese	293/326	89.9	89.5	85.4 – 93.7
Tamil	38/326	11.7	11.4	7.7 – 15.1
English	0/326	-	-	-
Other <sup>96</sup>	3/326	-	-	-
<b>Literate</b>				
Yes	262/326	80.4	80.5	76.2 – 84.8
<b>Highest level of education</b>				
Never attended school	21/326	6.4	6.8	4.0 – 9.7
Grade 1-5	65/326	19.9	18.9	14.0 – 23.7
Grade 6-10	166/326	50.9	51.2	45.4 – 57.1
Passed O/L	65/326	19.9	20.6	15.7 – 25.6
Passed A/L	9/326	2.8	2.5	1.0 – 4.0
Completed Diploma	0/326	-	-	-
Completed Degree	0/326	-	-	-
<b>Currently a student</b>				
Yes	1/326	0.3	0.3	0.0 – 0.7
<b>Type of institution enrolled in</b> (among current students)				
University	0/1	-	-	-
Technical College	0/1	-	-	-
Vocational School	1/1	100.0	100.0	-
<b>Monthly personal income</b>				
< 5,000 Rupees	8/323	2.5	3.7	0.9 – 6.5
5,000-10,000	14/323	4.3	4.0	1.9 – 6.0
10,001-20,000	70/323	21.7	23.1	18.4 – 28.1
20,001-30,000	112/323	34.7	34.5	29.2 – 39.7
30,001-40,000	82/323	25.4	23.6	18.7 – 28.2
> 40,000	37/323	11.5	11.5	7.3 – 15.0

<sup>94</sup> Other: Lived abroad<sup>95</sup> Other: Chillaw (n=1), missing (n=1)<sup>96</sup> Other: Muslim (n=3), Muslim/Malay (n=3)

Table 177: Socio-demographic characteristics, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of people that financially depend on the participant</b>				
0	7/325	2.2	1.8	0.5 – 3.1
1	105/325	32.3	33.7	28.1 – 39.4
2	63/325	19.4	19.7	15.4 – 24.0
3	62/325	19.1	17.4	13.4 – 21.1
4	49/325	15.1	15.6	11.6 – 19.6
5 and more	39/325	12.0	11.8	8.4 – 15.2
<b>Occupation</b>				
Street vendor/casual labourer	165/323	51.1	52.1	46.0 – 58.2
Factory worker	74/323	22.9	23.3	18.9 – 27.8
Professional/banker/accountant	2/323	0.6	0.5	18.9 – 27.8
Teacher	0/323	-	-	-
Business owner	2/323	0.6	0.7	0.0 – 1.8
Hairdresser/beautician/masseuse	2/323	0.6	0.5	0.0 – 1.2
Waitress/bartender/hotel employee	13/323	4.0	3.6	1.4 – 5.7
Musician/dancer/performer Tourism/ travel agent/tour guide	1/323	0.3	0.3	0.0 – 0.7
Government worker	2/323	0.6	0.6	0.0 – 1.3
Security guard	2/323	0.6	0.6	0.0 – 1.1
Fisherman/seafarer Farmer/agriculture worker	0/323	-	-	-
Taxi driver/Three wheeler driver	3/323	0.9	0.9	0.0 – 1.7
Other <sup>97</sup>	32/323	9.9	10.0	6.1 – 14.1
	23/323	7.1	6.3	3.8 – 8.8

Most PWID in Colombo are single (48.5%) or married (39.8%), living with their parents (36.2%), husband or wife (32.2%) or alone (17.3%) (Table 178). Just under half (43.9%) of all PWID have children, typically two (41.9%).

A married PWID with children in Colombo said that his habit is difficult for the household. His wife goes to work, and he hires a three-wheeler taxi. His oldest child of 12 years goes to school, but the younger one of 8 yrs stays at home, as they cannot afford to send him to school.

<sup>97</sup> Other: Mason (n=6), mechanic (n=2), food supplier (n=2), carpenter (n=2), bus conductor (n=1), cashier (n=1), cleaner (n=1), dealer (n=1), unemployed (n=1), electrician (n=1), liquor seller (n=1), plumber (n=1), tennis coach (n=1), clerk (n=1), welder (n=1)

**Table 178: Marital status, living arrangement and children, PWID Colombo**

Characteristic	ns		Population estimates	
	n/N	%	%	95% CI
<b>Marital status</b>				
Single	153/326	46.9	48.5	42.9 – 54.2
Living together but not married	0/326	-	-	-
Married	134/326	41.1	39.8	34.3 – 45.1
Divorced/Separated	39/326	12.0	11.8	8.3 – 15.2
Widowed	0/326	-	-	-
<b>Mode of living</b> (multiple answers possible)				
Alone	59/326	18.1	17.3	13.4 – 21.2
With husband/wife	108/326	33.1	32.2	27.1 – 37.1
With other sexual partner	7/326	2.1	2.6	0.4 – 4.9
With parents	116/326	35.6	36.2	31.2 – 41.4
With siblings	36/326	11.0	11.5	8.1 – 15.1
With children	49/326	15.0	14.3	10.6 – 17.9
With other family/relatives	2/326	0.6	0.6	0.0 – 1.3
With friend/roommate (not sexual partner)	6/326	1.8	2.5	0.4 – 4.7
With co-workers	0/326	-	-	-
<b>Type of residence</b>				
Temporary shelter	7/326	2.1	1.9	0.6 – 3.2
Boarding house	42/326	12.9	12.9	9.2 – 16.6
Parents' home	106/326	32.5	32.5	27.5 – 37.5
My home	170/326	52.1	52.4	46.7 – 58.0
Lodging	0/326	-	-	-
On the street	0/326	-	-	-
Brothel	0/326	-	-	-
Other <sup>98</sup>	1/326	0.3	0.3	0.0 – 0.8
<b>Has children</b>				
Yes	146/326	44.8	43.9	38.7 – 49.2
<b>Number of children</b>				
1	53/146	36.3	35.5	26.3 – 44.7
2	62/146	42.5	41.9	30.0 – 53.8
3	24/146	16.4	17.6	9.9 – 25.3
4	5/146	3.4	3.3	0.7 – 5.9
5 or more	2/146	1.4	1.7	0.0 – 3.4

### 10.1.8 General sexual history

Nearly all PWID in Colombo have had vaginal sex (99.6%) while few have had anal sex (18.0%) (Table 179). On average, PWID had 2.7 sexual partners in the last 12 months, with 0.3 male partners, and 2.7 female partners.<sup>99</sup> A total of 48 men reported sex with men in the last 12 months. Less than ten percent of PWID in Colombo have ever received money, goods or services in exchange for sex (7.6%) and ever had sex to obtain drugs (5.6%); however a higher percentage have ever given money, goods or services in exchange for sex (34.9%). Condom usage every time during sex in the last 12 months with women and men is less than ten percent among PWID (8.7% and 3.5%, respectively).

<sup>98</sup> Other: Lives in friend's house

<sup>99</sup> The data is presented in the PWID tables, and all those that follow, include data for the entire population of PWID, including the few females (n=7); however, typically a second subgroup is also presented, with solely the male respondents, with the female ones excluded. A separate subcategory for females is not provided, as there were only 7 female respondents.

**Table 179: General sexual history, PWID Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever had vaginal sex</b>				
Yes	325/326	99.7	99.6	98.7 – 100.0
<b>Ever had anal sex</b>				
Yes	60/325	18.4	18.0	13.9 – 22.1
<b>Number of <u>all</u> sexual partners in the past 12 months</b>				
Mean	2.8	-	2.7	-
Median	2.0	-	2.0	-
SD	4.0	-	3.9	-
Range	0-50	-	-	-
0	33/326	10.1	9.6	6.5 – 12.5
1	92/326	28.2	30.6	25.4 – 36.1
2	98/326	30.1	29.7	24.6 – 34.7
3	32/326	9.8	9.9	6.6 – 13.3
4	16/326	4.9	4.2	2.1 – 6.2
5	25/326	7.7	7.2	4.5 – 9.9
6 or more	30/326	9.2	8.8	5.3 – 12.3
<b>Number of <u>male</u> sexual partners in the past 12 months</b>				
Mean	0.3	-	0.3	-
Median	-	-	-	-
SD	0.7	-	0.7	-
Range	0-4	-	-	-
0	240/293 <sup>100</sup>	81.9	81.7	77.0 – 86.4
1	28/293	9.6	10.1	6.5 – 13.8
2	18/293	6.1	6.0	3.1 – 8.8
3	6/293	2.0	1.9	0.5 – 3.2
4	1/293	0.3	0.3	0.0 – 0.7
5	0/293	-	-	-
6 or more	0/293	-	-	-
<b>Among men</b>				
Mean	0.3	-	0.3	-
Median	0.0	-	0.7	-
SD	0.7	-	-	-
Range	0-4	-	-	-
0	239/287 <sup>101</sup>	83.3	82.9	78.4 – 87.5
1	25/287	8.7	9.2	5.5 – 12.9
2	16/287	5.6	5.6	2.8 – 8.5
3	6/287	2.1	1.9	0.5 – 3.3
4	1/287	0.3	0.3	0.0 – 0.7
5	0/287	-	-	-
6 or more	0/287	-	-	-

<sup>100</sup> For this indicator, 33 missing data, including 1 woman

<sup>101</sup> n=32 missing, all men

Table 179: General sexual history, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Proportion of PWID who are MSM (men who reported having &gt;0 male partners in the last 12 months)</b>	48/287	16.7	17.1	12.7 – 21.5
<b>Number of <u>female</u> sexual partners in the past 12 months</b>				
Mean	2.8	-	2.7	-
Median	2.0	-	2.0	-
SD	3.8	-	3.7	-
Range	0-46	-	-	-
	5/293 <sup>102</sup>	1.7		0.0 – 2.8
0	96/293	32.8	1.4	29.7 – 42.2
1	104/293	35.5	35.9	29.1 – 40.0
2	32/293	10.9	34.5	7.2 – 14.1
3	14/293	4.8	10.6	1.9 – 6.3
4	19/293	6.5	4.1	3.2 – 8.7
5	23/293	7.8	6.0	4.0 – 10.9
6 or more			7.5	
<b>Among men</b>				
Mean	2.8	-	2.7	-
Median	2.0	-	2.0	-
SD	3.8	-	3.7	-
Range	0-46	-	-	-
0	3/287 <sup>103</sup>	1.0	0.8	0.0 – 1.8
1	96/287	33.4	36.5	30.4 – 43.0
2	103/287	35.9	35.0	29.4 – 40.5
3	30/287	10.5	10.3	6.8 – 13.7
4	14/287	4.9	4.2	1.9 – 6.4
5	18/287	6.3	5.6	3.0 – 8.1
6 or more	23/287	8.0	7.6	4.1 – 11.0
<b>Ever received money, goods or services in exchange for sex</b>				
Yes	23/292	7.9	7.6	4.6 – 10.7
<b>Ever had sex to obtain drugs</b>				
Yes	19/291	6.5	5.6	3.2 – 8.0
<b>Ever given money, goods or services in exchange for sex</b>				
Yes	104/292	35.6	34.9	28.8 – 40.9
<b>Condom use during last 12 months (sex with <u>women</u>)</b>				
Every Time	29/317	9.1	8.7	5.6 – 11.7
Almost every Time	44/317	13.9	13.3	9.5 – 16.9
Sometimes	85/317	26.8	26.3	21.1 – 31.4
Never	159/317	50.2	51.8	45.9 – 57.9
<b>Among men</b>				
Every Time	29/312	9.3	8.8	5.6 – 11.9
Almost every Time	44/312	14.1	13.5	9.7 – 17.2
Sometimes	82/312	26.3	25.6	20.6 – 30.5
Never	157/312	50.3	52.1	46.2 – 58.2

<sup>102</sup> n=33 missing, 1 woman and 32 men<sup>103</sup> n=32 missing, all men

Table 179: General sexual history, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Condom use during last 12 months (sex with men)</b>				
Every Time	2/52 <sup>104</sup>	3.8	3.5	0.0 – 6.9
Almost every Time	16/52	30.8	31.5	20.1 – 43.1
Sometimes	14/52	26.9	27.1	6.3 – 47.8
Never	20/52	38.5	37.9	17.2 – 58.5
<b>Among men (who had sex with men)</b>				
Every Time	1/47	2.1	1.9	-
Almost every Time	16/47	34.0	34.5	22.6 – 46.6
Sometimes	11/47	23.4	23.9	2.5 – 45.4
Never	19/47	40.4	39.6	18.3 – 60.8

### 10.1.9 Last sexual partner

Sex of last partner is predominantly female (93.2%), although there were male partners as well (6.1%) indicating MSM amongst PWID (Table 180). The last sexual partner was mainly a regular partner (52.8%), with the rest of the population having either a casual partner (21.9%) or a one-time only partner (24.1%). Condom usage with last sexual partner is at less than a quarter (24.0%). Over a quarter (27.8%) of PWID in Colombo gave money, goods or services in exchange for sex with their last sexual partner, whereas less than ten percent (5.8%) received money, goods or services. Most respondents (69.8%) believed their last sexual partner's HIV status to be negative, and less than ten percent indicated their last sexual partner was a PWID. Of those 27 respondents who indicated their last sexual partner was a PWID, more than two thirds shared a needle or syringe.

Table 180: Last sexual partner, PWID Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Sex of the last sexual partner</b>				
Female	309/326	94.8	93.2	89.5 – 96.6
Male	15/326	4.6	6.1	2.7 – 9.6
Other	2/326	0.6	0.7	0.0 – 1.7
<b>Among men</b>				
Female	304/319	95.3	93.7	89.9 – 97.1
Male	13/319	4.1	5.6	2.2 – 9.2
Other	2/319	0.6	0.7	0.0 – 1.7
<b>Type of last sexual partner</b>				
Regular	170/322	52.8	54.0	48.5 – 59.8
Casual	73/322	22.7	21.9	17.3 – 26.3
One Time Only	79/322	24.5	24.1	19.0 – 29.1
<b>Condom used with last sexual partner</b>				
Yes	75/290	25.9	24.0	18.8 – 28.9
<b>Provided money, goods or services in exchange for sex with last sexual partner</b>				
Yes	85/290	29.3	27.8	22.4 – 32.9

<sup>104</sup> This indicator was asked only to those who said they had male partners, minus one missing

Table 180: Last sexual partner, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Received money, goods or services in exchange for sex with last sexual partner</b>				
Yes	15/292	5.1	4.8	2.3 – 7.4
<b>Last sexual partner's HIV status</b>				
Negative	205/292	70.2	69.8	64.3 – 75.5
Positive	1/292	0.3	0.8	0.0 – 2.0
Don't know	86/292	29.5	29.3	23.7 – 34.9
<b>Last sexual partner was PWID</b>				
Yes	27/293	9.2	8.1	5.2 – 10.8
No	261/293	89.1	90.4	87.3 – 93.5
Don't know	5/293	1.7	1.6	0.3 – 2.8
<b>Shared needles or syringes with last sexual partner</b>				
Yes	17/27	63.0	64.8	17.5 – 100.0

### 10.1.10 Male condom access and use

Nearly all (98.3%) PWID in Colombo have ever heard of a male condom and know where to obtain one (92.9%); however, only two thirds (67.2%) have ever used one (Table 181). Private pharmacies and chemists were the most common places mentioned to obtain condoms (97.8%) and their current main source of condoms (84.3%). Less than ten percent (6.0%) of PWID have been given free condoms in the last 12 months; however most PWID find condoms affordable (very affordable: 64.9%; somewhat affordable: 16.4%) and easy to obtain (very easy: 66.8%; somewhat easy: 16.2%).

Table 181: Male condom access and use, PWID Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of a male condom</b>				
Yes	320/326	98.2	98.3	97.0 – 99.6
<b>Ever used a male condom</b>				
Yes	218/320	68.1	67.2	61.8 – 72.5
<b>Knows where to obtain male condoms</b>				
Yes	299/320	93.4	92.9	89.9 – 95.8
<b>Places where they can obtain male condoms</b> (multiple answers possible)				
Government STD clinic	7/299	2.3	2.2	0.7 – 3.7
Government non-STD clinic	1/299	0.3	0.3	0.0 – 0.8
Private clinic	1/299	0.3	0.6	0.0 – 1.8
Private pharmacy or chemist	291/299	97.3	97.8	96.3 – 99.3
Traditional healer/Herbalist	1/299	0.3	0.2	0.0 – 0.5
Neighbourhood market/Stand	0/299	-	-	-
Friends	0/299	-	-	-
Sex partner/s	2/299	0.7	1.0	0.0 – 2.3
Bar	4/299	1.3	1.1	0.0 – 2.0
Service Station/s	2/299	0.7	0.6	0.0 – 1.5
Other <sup>105</sup>	4/299	1.3	1.1	0.0 – 2.1

<sup>105</sup> Others not further specified



Table 181: Male condom access and use, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Main source/s of condoms</b> (multiple answers possible)				
Government STD clinic	5/325	1.5	1.2	0.3 – 2.6
non-STD clinic	0/325	-	-	-
Private clinic	0/325	-	-	-
Private pharmacy or chemist	273/325	84.0	84.3	80.7 – 80.7
Traditional healer/Herbalist	3/325	0.9	1.6	0.0 – 3.5
Neighbourhood market/Stand	1/325	0.3	0.2	0.0 – 0.4
Friends	2/325	0.6	0.7	0.0 – 1.6
Sex partner/s	3/325	0.9	0.7	0.0 – 1.5
Bar	1/325	0.3	0.3	0.0 – 0.8
Service Station/s	4/325	1.2	1.0	0.0 – 1.9
Don't know	35/325	10.8	10.7	7.6 – 13.8
<b>Usually carries condoms</b>				
Yes	23/320	7.2	7.2	4.5 – 9.9
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>				
Yes	19/320	5.9	6.0	3.5 – 8.5
<b>Condom is affordable</b>				
Very affordable	208/320	65.0	64.9	59.8 – 70.1
Somewhat affordable	52/320	16.3	16.4	12.6 – 20.2
Not affordable	10/320	3.1	3.1	1.3 – 4.9
Don't know	50/320	15.6	15.5	11.4 – 19.6
<b>Condom is easy to obtain</b>				
Very easy	213/319	66.8	66.8	61.6 – 71.9
Somewhat easy	52/319	16.3	16.2	12.0 – 20.4
Not easy	6/319	1.9	2.0	0.5 – 3.5
Don't know	48/319	15.0	15.1	11.0 – 19.1

### 10.1.11 Lubricant availability and use

Not many PWID have ever heard of lubricant (16.0%), and most have never used it (77.7%)(Table 182). The few who have (22.3%) have used Vaseline (11.6%) or baby oil (8.1%). Just over a quarter (28.3%) of PWID would be interested in using lubricant in the future.

Table 182: Lubricant access and use, PWID Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of lubricant</b>				
Yes	52/326	16.0	16.0	11.8 – 20.1
<b>Lubricant use during vaginal or anal sex</b>				
Always	0/51	-	-	-
Usually	1/51	2.0	4.7	3.3 – 6.3
Sometimes	6/51	11.8	12.7	1.9 – 23.4
Rarely	3/51	5.9	4.9	0.0 – 10.1
Never	41/51	80.4	77.7	65.8 – 89.6

Table 182: Lubricant access and use, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Type of lubricant used</b>				
Glycerine	0/10	-	-	-
Saliva/Water	1/10	10.0	5.5	-
Vaseline	4/10	40.0	53.8	51.5 – 56.6
Baby Oil	3/10	30.0	37.2	7.7 – 68.0
Lotion	4/10	40.0	32.8	-
Other Oil	0/10	-	-	-
Water-Based	1/10	10.0	-	-
Silicone-based	2/10	20.0	16.4	0.0 – 45.9
Soap	0/10	-	-	-
What I get from peer educator	0/10	-	-	-
<b>Interested in using lubricant in the future</b>				
Yes	14/52	26.9	28.4	15.6 – 41.5
No	38/52	73.1	71.6	58.5 – 84.4

### 10.1.12 Knowledge of STI symptoms in women and men

Just over two thirds (65.7%) of PWID in Colombo have heard of diseases that can be transmitted sexually, although only a quarter (26.5%) know it is possible to have an STI without a symptom (Table 183). The most commonly mentioned signs of STIs in women and men are itching (23.5% and 53.7%, respectively), genital discharge (20.8% and 47.7%, respectively), and swelling in the groin area (16.7% and 25.2%, respectively). The most commonly mentioned place where someone in the community can obtain an treatment for an STI is a Government STD clinic (31.0%) or Government clinic or hospital (28.4%).

Table 183: Knowledge of STI symptoms in women and men, PWID Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of diseases that can be transmitted sexually</b>				
Yes	218/326	66.9	65.7	60.6 – 70.8
<b>Knows it is possible to have an STI without symptoms</b>				
Yes	84/313	25.8	26.5	21.6 – 31.4
<b>Mentioned as a sign/symptom of STIs in women</b> (multiple answers possible)				
Abdominal pain	2/218	0.9	0.7	0.0 – 1.4
Genital discharge	45/218	20.6	20.8	15.0 – 26.7
Foul smelling discharge	7/218	3.2	2.9	1.1 – 4.6
Burning pain on urination	21/218	9.6	9.8	6.2 – 13.6
Genital ulcers or sores	17/218	7.8	7.8	4.4 – 11.0
Swelling in groin area	38/218	17.4	16.7	11.5 – 21.8
Itching	54/218	24.8	23.5	17.7 – 29.2
<b>Does not know any symptoms of STIs in women</b> (among those who have heard of STIs)				
Yes	116/218	53.2	54.7	47.6 – 61.9

Table 183: Knowledge of STI symptoms in women and men, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Mentioned as a sign/symptom of STIs in men</b> (multiple answers possible)				
Abdominal pain	6/218	2.8	2.7	0.4 – 5.0
Genital discharge	104/218	47.7	47.7	41.3 – 54.0
Foul smelling discharge	2/218	0.9	1.5	0.1 – 3.1
Burning pain on urination	37/218	17.0	18.6	13.3 – 24.1
Genital ulcers or sores	19/218	8.7	7.7	4.2 – 11.0
Swelling in groin area	55/218	25.2	25.5	19.4 – 31.6
Itching	114/218	52.3	53.7	46.0 – 61.6
<b>Does not know any symptoms of STIs in men</b>				
Yes	37/218	17.0	17.2	10.9 – 23.6
<b>Places where someone from the community who has an STI can get treatment</b> (multiple answers possible)				
Ayurvedic physician	0/326	-	-	-
Pharmacy	12/325	3.7	3.9	1.7 – 6.0
Private clinic	30/326	9.2	9.4	6.3 – 12.6
Government STD clinic	106/326	32.5	31.0	26.0 – 35.8
Government clinic or hospital (non-STD)	89/326	27.3	28.4	23.2 – 33.8
Don't know	112/326	34.4	33.8	28.4 – 39.3

### 10.1.13 Patterns of STI care seeking

Fewer than ten percent of PWID have had a doctor confirm the presence of an STI in the past 12 months (2.6%), self report symptoms of discharge (1.7%) or an ulcer/sore (1.4%) (Table 184). Of those who had discharge or sore/ulcer, most sought treatment (population estimates not available due to small sample sizes, sample estimates: 83.3% and 60.0%, respectively). Government STD clinics (sample estimate: 60.0%) were the most commonly visited facilities due to recommendations by a friend (sample estimate: 80.0%). All respondents who sought treatment (n=6) told the provider that they inject drugs and were satisfied with the treatment they received from the health care provider (very satisfied: 83.3%; somewhat satisfied: 16.7%).

Table 184: Patterns of STI care seeking

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Doctor confirmed STI in the last 12 months</b>				
Yes	6/218	1.8	2.6	0.6 – 4.6
<b>STI symptoms (<u>discharge</u>) in the last 12 months</b>				
Yes	6/320	1.8	1.7	0.4 – 3.0
<b>Sought treatment for <u>discharge</u></b>				
Yes	5/6	83.3	-	-

Table 184: Patterns of STI care seeking (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for not seeking treatment for discharge</b> (multiple answers possible)				
Didn't know where to go	0/1	-	-	-
Embarrassed or afraid	0/1	-	-	-
Could not afford treatment	0/1	-	-	-
Unable to get transportation	0/1	-	-	-
Didn't think I needed it	1/1	100	100	-
<b>STI symptoms (sore or ulcer) in the last 12 months</b>				
Yes	5/321	1.5	1.4	0.3 – 2.6
<b>Sought treatment for sore or ulcer</b>				
Yes	3/5	60.0	-	-
<b>Reasons for not seeking treatment for sore or ulcer</b> (multiple answers possible)				
Didn't know where to go	0/2	0	-	-
Embarrassed or afraid	1/2	50.0	-	-
Could not afford treatment	0/2	-	-	-
Unable to get transportation	0/2	-	-	-
Didn't think I needed it	1/2	50.0	-	-
<b>Places where STI treatment (for discharge, sore, or ulcer) was sought</b> (multiple answers possible)				
Government STD clinic	3/5	60.0	-	-
Government non-STD clinic	0/5	-	-	-
Private clinic	1/5	20.0	-	-
Private pharmacy or chemist	1/5	20.0	-	-
Traditional healer/Herbalist	0/5	0.0	-	-
Medicine or herbs from home	0/5	0.0	-	-
<b>Reasons for choosing this/these places</b> (multiple answers possible)				
Confidentiality	1/5	20.0	-	-
Affordability	0/5	-	-	-
Recommendation by friend or acquaintance	4/5	80.0	-	-
Quality and/or specialized care given at this place	0/5	-	-	-
Knows the caregivers	0/5	-	-	-
Known friendliness of the caregivers	0/5	-	-	-
Proximity/Location	0/5	-	-	-
<b>Told health care provider that they inject drugs last time they received STI treatment or diagnosis</b>				
Yes	6/6	100.0	100.0	-
<b>Satisfaction with treatment from health care provider during last visit for STI treatment</b>				
Very satisfied	5/6	83.3	-	-
Somewhat satisfied	1/6	16.7	-	-
Not satisfied	0/6	-	-	-

### 10.1.14 HIV information and personal risk perception

Just under three quarters (71.6%) of PWID in Colombo have heard of HIV/AIDS with the main sources of information stemming from NGOs (25.5%) and health services (24.3%) (Table 205). Among PWID it is rare to have discussed HIV/AIDS with any sexual partner (82.1% have not), although among those who did, more than three quarters of PWID had sexual partners tell them their HIV status (81.2%). Less than a quarter (22.2%) of PWID know someone is HIV positive or who has died of AIDS. The majority of PWID believe they are at small risk (44.1%) for contracting HIV because they inject drugs (76.8%), while some believe they are at no risk (25.3%) of contracting HIV, primarily because they trust their partners (86.1%). Of the n=21 PWID who believed their risk perception to be high, only half (n=10) used a condom at last sex (data not shown).<sup>106</sup>

Two PWID interviewed mentioned they were concerned about safe injection practices to reduce their risk. One said to make sure not to share injection equipment he always buys a new needle and syringe at the pharmacy. While he uses the injection in the presence of friends, he does not share his injection equipment, when his friends want to inject, they have to get their own equipment. The other PWID also believed to have reduced his risk by always using a clean needle; however, he was not aware that by sharing the syringe itself, his injection behaviour was actually unsafe.

**Table 185: HIV information and personal risk perception, PWID Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of HIV/AIDS</b>				
Yes	234/325	72.0	71.6	66.3 – 77.0
<b>Main source of the most thorough information about HIV/AIDS</b>				
School	21/234	9.0	8.5	5.1 – 11.7
Health services	58/234	24.8	24.3	18.6 – 30.0
Workplace	1/234	0.4	0.4	0.0 – 1.1
Friends/Family	33/234	14.1	13.6	8.4 – 12.6
Television	22/234	9.4	8.8	4.9 – 12.6
Newspaper/Magazines	23/234	9.8	11.0	6.2 – 15.9
Posters/Billboards	8/234	3.4	3.5	1.0 – 6.0
Pamphlets/Leaflets	4/234	1.7	2.0	0.0 – 4.0
Radio	1/234	0.4	0.4	0.0 – 1.2
NGOs	58/234	24.8	25.5	20.9 – 31.0
Other: Prison	5/234	2.1	2.0	0.2 – 3.8
<b>Discussed HIV/AIDS with any sexual partner</b>				
Yes, all	3/230	1.3	1.5	0.0 – 3.2
Yes, some	37/230	16.1	16.4	11.1 – 21.7
No, none	19/230	82.6	82.1	76.6 – 87.7
<b>Sexual partner/s told the participant their HIV status</b>				
Yes, all	1/39	2.6	2.4	-
Yes, some	31/39	79.5	81.2	73.6 – 89.1
No, none	7/39	17.9	16.4	8.5 – 24.1
<b>Knows somebody who is HIV-positive or has died of AIDS</b>				
Yes	54/234	23.1	22.2	17.1 – 27.2

<sup>106</sup> Note, only n=21 and not n=28 (in table) due to missing data on condom use at last sex.

Table 185: HIV information and personal risk perception, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Close friend or relative died of HIV/AIDS</b>				
Yes, close friend	3/207	1.4	1.4	0.3 – 2.4
Yes, close relative	11/207 <sup>107</sup>	5.3	5.7	2.6 – 8.9
<b>Perception of personal HIV risk</b>				
No risk	82/324	25.3	27.7	21.2 – 34.4
Small risk	143/324	44.1	42.4	36.1 – 48.4
Moderate risk	36/324	11.1	10.6	7.3 – 14.0
High risk	28/324	8.6	9.0	5.9 – 12.1
Don't know	35/324	10.8	10.4	7.1 – 13.5
<b>Reasons for believing they are at risk of contracting HIV</b> (among those who said they were at risk)				
Many sexual partners	24/207	11.6	9.7	5.1 – 14.0
Didn't always use condoms	17/207	8.2	8.5	5.0 – 12.2
Injected drugs	159/207	76.8	78.7	73.3 – 84.4
Partner has other partners	7/207	3.4	3.1	0.9 – 5.2
<b>Reasons for believing they are not at risk of contracting HIV</b> (among those who said they were not at risk) (multiple answers possible)				
Trust my partner/s	68/81	84.0	86.1	79.1 – 93.3
Always use condoms	12/81	14.8	13.5	6.2 – 20.8
Other <sup>108</sup>	1/81	1.2	0.3	0.0 – 0.7

### 10.1.15 Knowledge of HIV and AIDS

Knowledge of HIV and AIDS amongst PWID in Colombo is better than amongst other groups, in other districts, with correct responses in terms of preventing transmission ranging from 60.5% to 85.8% (Table 186). However, comprehensive knowledge is low at only a third of respondents (33.3%) correctly answering all five knowledge questions. Two thirds of PWID (66.3%) correctly know that a mother can transmit HIV to her unborn child, however less than a quarter (20.0%) have heard of ART.

Table 186: Knowledge of HIV and AIDS, PWID Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners</b>				
Yes	272/319	85.3	85.6	81.5 – 89.8
<b>Person can reduce the risk of getting HIV by using a condom every time he/she has sex</b>				
Yes	279/323	86.4	85.8	81.2 – 90.3

<sup>107</sup> Missing and do not know excluded

<sup>108</sup> Other: I have tested for HIV before this survey and the result was no risk (n=1)

Table 186: Knowledge of HIV and AIDS, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Healthy-looking person can have HIV</b> Yes	198/322	61.5	60.5	54.8 – 66.2
<b>Person can get HIV from mosquito bites</b> No	231/316	73.1	74.7	70.0 – 79.6
<b>Person can get HIV by sharing food with someone who is infected</b> No	254/326	77.9	79.2	74.9 – 83.7
<b>Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission</b> Yes	101/307	32.9	33.3	27.5 – 39.1
<b>GARP Knowledge Composite Indicator without GARP4 (mosquito question)</b> Yes	124/314	39.5	39.1	33.4 – 44.8
<b>HIV can be transmitted from mother to her unborn child</b> Yes No	218/323 105/323	67.5 32.5	66.3 33.7	60.9 – 71.7 28.3 – 39.2
<b>Ever heard of ART</b> Yes	67/326	20.6	20.0	15.9 – 24.1

### 10.1.16 Stigma related to HIV and AIDS

Stigma related to HIV and AIDS amongst PWID is very much present with only just over half of all PWID (58.0%) saying they would take care of an HIV positive family member in their own home and less than half believe that an HIV positive student should be allowed to continue attending school (39.9%) and would buy food from an HIV positive food seller (34.5%) (Table 187). Furthermore, nearly three quarters (72.6%) would keep it confidential if a family member became HIV positive.

Table 187: Stigma related to HIV and AIDS, PWID Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Agrees to take care of an HIV positive family member at home</b> Yes	184/323	57.0	58.0	52.6 – 63.4
<b>Agrees that an HIV positive student should be allowed to continue attending a school</b> Yes	135/323	41.4	39.9	34.4 – 45.2
<b>Agrees to buy food from an HIV positive food seller</b> Yes	115/326	35.3	34.5	29.5 – 39.4
<b>Thinks that, if a family member becomes HIV positive, his/her HIV status should remain confidential</b> Yes	237/326	72.7	72.6	67.8 – 77.4

### 10.1.17 HIV testing

While nearly three quarters (72.5%) of PWID in Colombo know where to go for an HIV test, less than a quarter (17.2%) have ever been for an HIV test, and less than ten percent (8.7%) have been for a test in the last 12 months and received their result (Table 188). The most common reason for getting an HIV test is wanting to know their status (95.8%), while the most common reason for not getting an HIV test is not knowing where to go (66.1%). Most PWID perceive their current HIV status to be negative (71.5%), which aligns with the results of the biological results, as no positive cases of HIV were found in Colombo amongst PWID. Most PWID had their last HIV test at a Government STD clinic (62.9%) and were satisfied with the services they received from the health care provider (very satisfied: 24.4%; satisfied: 72.3%), nearly all (93.1%) told the provider that they inject drugs (93.1%) and none believe the healthcare provider treated them differently based on this information.

**Table 188: HIV test, PWID Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Knows where HIV testing can be obtained</b>				
Yes	221/308	71.8	72.5	67.9 – 77.4
<b>Ever tested for HIV</b>				
Yes	55/326	16.9	17.2	13.2 – 21.2
<b>The test was voluntary</b>				
Yes	54/55	98.2	99.3	-
<b>Site where last testing for HIV took place</b>				
Government STD Clinic	35/55	63.6	62.9	51.2 – 74.7
Government non-STD Clinic	4/55	7.3	9.0	-
Private Clinic	4/55	7.3	6.6	0.0 – 14.1
Private Pharmacy or Chemist	2/55	3.6	3.3	0.1 – 6.5
Prison/Jail (from “other”)	11/55	20.0	19.6	10.0 – 28.9
<b>Reasons for never getting an HIV test</b> (multiple answers possible)				
Don’t know where to go	176/271	64.9	66.1	59.8 – 72.6
Always use condoms	5/271	1.8	1.7	0.4 – 2.9
Not at risk of getting HIV	28/271	10.3	10.7	6.7 – 14.7
Didn’t have time/Too busy	70/271	25.8	25.1	20.1 – 30.0
I trust my partner	29/271	10.7	10.4	6.6 – 14.2
Afraid of knowing I may be HIV positive	4/271	1.5	1.7	0.1 – 3.3
Lack of confidentiality	4/271	1.5	1.3	0.0 – 2.7
Inconvenient testing location	7/271	2.6	2.2	0.5 – 3.8
No money	1/271	0.4	0.3	0.0 – 0.9
<b>Time since last HIV test</b>				
≤ 1 year	39/55	70.9	69.9	56.8 – 82.8
> 1 year	16/55	29.1	30.1	17.2 – 43.2
<b>Knows result of last HIV test</b>				
Yes	37/55	67.3	71.7	58.8 – 85.1
<b>Tested for HIV in the past 12 months and knows result</b>				
Yes	27/326	8.3	8.7	5.8 – 11.8



Table 188: HIV test, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for the last HIV test</b> (multiple answers possible)				
Wanted to know my HIV status	52/55	94.5	95.8	92.7 – 99.2
My partner asked me to get tested	0/55	-	-	-
Wanted to start sexual relations with a new partner	0/55	-	-	-
Wanted to get married	0/55	-	-	-
Need for loan/insurance coverage	0/55	-	-	-
Employer requested the test	2/55	3.6	3.0	-
Felt sick	0/55	-	-	-
Advised by health worker	4/55	7.3	5.8	1.8 – 9.6
Advised by peer educator	0/55	-	-	-
Pregnant (among women)	0/55	-	-	-
Other <sup>109</sup>	2/55	3.6	0.5	0.0 – 1.2
<b>Result of last HIV test</b>				
HIV-negative	39/51	76.5	78.4	70.2 – 86.7
HIV-positive	0/51	-	-	-
Indeterminate	0/51	-	-	-
Did not get the result	6/51	11.8	10.3	4.4 – 16.1
Don't know	6/51	11.8	11.3	4.2 – 18.4
<b>Reason for not getting last HIV test result<sup>110</sup></b>				
Didn't have time/Too busy	2/4	50.0	52.7	3.9 – 100.0
Not infected	0/4	-	-	-
Too scared	0/4	-	-	-
Testing centre didn't have result	0/4	-	-	-
Other <sup>111</sup>	2/4	50.0	47.3	0.0 – 96.1
<b>Perception of their current HIV status</b>				
HIV-negative	233/326	71.5	71.5	66.5 – 76.5
HIV-positive	2/326	0.6	1.0	0.0 – 2.6
Don't know	91/326	27.9	27.5	22.6 – 32.3
<b>Satisfaction with quality of services provided during last HIV testing</b>				
Very satisfied	14/55	25.5	24.4	16.3 – 32.3
Satisfied	39/55	70.9	72.3	64.3 – 80.5
A little satisfied	1/55	1.8	1.7	0.0 – 3.9
Not satisfied	1/55	1.8	1.7	-
<b>Told health care provider or counsellor that they inject drugs at last HIV testing</b>				
Yes	51/55	92.7	93.1	86.2 – 100.0

<sup>109</sup> Other: Compulsory (n=1)<sup>110</sup> This question had 2 missing values and 3 answered that they got the results – contradicting their answer before, therefore those 3 were removed from the denominator of this question and the prior question, due to lack of clarity.<sup>111</sup> Other not specified for this question

Table 188: HIV test, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for not telling health care provider or counsellor they inject drugs</b> (multiple answers possible)				
Afraid of discrimination/Not providing testing	1/4	25.0	27.7	0.0 – 73.1
Afraid provider would tell police/legal authorities	1/4	25.0	24.3	0.0 – 65.4
It was not necessary to discuss	1/4			
Afraid provider would not keep information confidential	1/4	25.0	24.3	0.0 – 65.4
Little or no contact/interaction with counsellor/provider	0/4		24.0	0.0 – 65.2
Shy/Embarrassed	0/4	-	-	-
Provider already knew	0/4	-	-	-
Don't know	0/4	-	-	-
<b>Felt that health care provider or counsellor reacted in a negative or discriminatory way because they inject drugs</b>				
Yes	0/51	-	-	-

### 10.1.18 Experience of stigma, discrimination and violence

Experienced levels of stigma, discrimination and violence are present amongst PWID, with around a quarter of PWID being refused police assistance because someone believed they inject drugs (26.7%) and experienced verbal insults as well (22.0%) (Table 189). Less than ten percent were refused health care (3.8%) or physically abused (5.8%) and none were sexually assaulted.

Table 189: Experience of stigma, discrimination and violence

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Has been refused health care because someone believed they inject drugs</b>				
Yes	11/323	3.4	3.8	1.5 – 6.1
<b>Has been refused police assistance because someone believed they inject drugs</b>				
Yes	89/326	27.3	26.7	21.7 – 31.6
<b>Has been verbally insulted because someone believed they inject drugs</b>				
Yes	71/322	22.0	22.0	17.5 – 26.5
<b>Has been hit, kicked, or beaten because someone believed they inject drugs</b>				
Yes	22.0	6.7	5.8	3.6 – 7.8
<b>Has been sexually assaulted or raped</b>				
Yes	0/326	-	-	-

### 10.1.19 Health care utilization

Less than a fifth (14.0%) of PWID have sought health care for any reason during the last 12 months, of those who did, a few had difficulty (4.8%), relating to long waiting times (100.0%) (Table 190).

**Table 190: Health care utilization, PWID Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Sought medical care for any reason during last 12 months</b>				
Yes	47/326	14.4	14.0	10.1 – 17.8
<b>Had difficulty getting medical care during last 12 months</b>				
Yes	2/47	4.3	4.8	0.0 – 12.3
<b>Type of difficulty</b> (multiple answers possible)				
Too expensive	0/2	-	-	-
Too far away	0/2	-	-	-
Could not take time from work	0/2	-	-	-
Long waiting times	2/2	100	100	-

### 10.1.20 Programme coverage

Very few PWID in Colombo have had contact with a peer educator in the last six months (4.2%), of those who did the level of contact varied, with just under half (41.6%) being in contact one or two times, and similarly (44.8%) three to six times. General information on HIV and STIs (100.0%) and condoms (78.8%) were the most provided services (Table 191). Only a handful of PWID (4.1%) meet the criteria for having been reached by prevention programmes (GARP indicator<sup>112</sup>).

Two PWID interviewed in the qualitative interviews said not to be aware of any methadone or needle and syringe exchange programmes, and neither was the outreach worker who accompanied them, indicating a potential gap in the harm reduction response.

**Table 191: Programme coverage, PWID Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Contact with a health peer educator in the community in the last 6 months</b>				
Yes	14/326	4.3	4.2	2.1 – 6.3
<b>Number of times of contact with a health peer educator in the last 6 months</b>				
1-2	6/14	42.9	41.6	23.7 – 59.2
3-6	6/14	42.9	44.8	27.3 – 62.8
> 6	2/14	14.3	13.6	-

<sup>112</sup> Officially, GARP 2014 guidelines do not require this indicator for GARP reporting for PWID, however it has been included for comparison across groups.

Table 191: Programme coverage, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Services or information received from the health peer educator</b>				
General HIV/STI prevention/transmission information	14/14	100	100	-
Condoms	11/14	78.6	78.8	61.4 – 96.2
Referral for STI treatment	0/14	-	-	-
Referral for VCT	0/14	-	-	-
Medical visit	4/14	26.6	27.1	9.6 – 44.4
<b>Reached with HIV prevention programs</b> (received free condoms in the last 12 months and know where HIV testing can be obtained)				
Yes	14/326	4.3	4.1	2.2 – 6.1

### 10.1.21 Alcohol and drug use

Just over two thirds (68.5%) of PWID have ever consumed alcohol; and most (42.1%) have not drunk in the last four weeks (Table 192). Most illicit substance use started between 18-24 years of age (45.4%) and the length of time using is mostly 11-20 years (37.2%), The first age of injecting drugs is slightly older with most people injecting for the first time between 25 and 34 years of age (41.8%), but length of time injecting is also predominantly between 11 and 20 years (35.7%). Over the past 12 months, frequency of injecting drug use is typically once a month or less (34.1%), with heroin the most commonly injected drug (99.8%). When type and frequency of injecting drug use was further explored, heroin was the most commonly reported drug, with over a third (37.6%) of PWID using once a month or less, predominantly through injecting (98.7%). Only a handful of PWID used other illicit drugs in the last 12 months including cannabis (23.7%), cocaine (0.7%), ecstasy (0.8%), amphetamines (0.4%), opium (0.4%), and hashish (3.3%) (data not presented).

Two PWID interviewed said that they do not know people who inject drugs every day, but they also said “if we could get good stuff every day, we may do it every day”. However, even if they would have money now, they could not buy good quality heroin as it was not available in the market. They said that the price of heroin had gone up from 500 rupees to 2,500 rupees. They can only buy very low quality at present. They prefer injecting heroin as the effect stays longer.

Table 192: Alcohol and drug use, PWID Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever consumed alcohol</b>				
Yes	225/326	69.0	68.5	62.8 – 74.1
<b>Alcohol consumption in the last 4 weeks</b>				
Never drink alcohol	3/223	1.3	1.3	0.0 – 2.9
Never in the last 4 weeks	99/223	44.4	42.1	34.2 – 49.7
Once a week	41/223	18.4	18.4	12.2 – 24.5
Less than once a week	69/223	30.9	31.9	24.7 – 39.3
Every day	11/223	4.9	6.4	2.7 – 10.2

Table 192: Alcohol and drug use, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Age groups at first use of illicit drugs (injecting and non-injecting)</b>				
Mean	23.9	-	24.1	-
SD	6.5	-	6.6	-
Median	22.0	-	22.0	-
Range	12-44	-	-	-
< 18	39/305	12.8	12.8	8.9 – 16.7
18-24	144/305	47.2	45.4	39.7 – 50.8
25-34	90/305	29.5	30.7	25.1 – 36.5
35-44	32/305	10.5	11.1	6.6 – 15.8
≥ 45	0/305	-	-	-
<b>Length of time using illicit drugs (injecting and non-injecting)</b>				
Mean	15.4	-	15.3	-
SD	9.2	-	9.3	-
Median	15.0	-	14.0	-
Range	0-42	-	-	-
≤ 1 year	11/309	3.6	3.4	1.3 – 5.4
2-5 years	37/309	12.0	12.6	8.7 – 16.5
6-10 years	54/309	17.5	18.0	13.6 – 22.4
11-20 years	118/309	38.2	37.2	31.0 – 43.2
> 20 years	89/309	28.8	28.9	23.8 – 34.0
<b>Age groups at first <u>injection</u> of illicit drugs (self-injection and injection by another person)</b>				
Mean	27.4	-	27.6	-
SD	7.7	-	7.7	-
Median	26.0	-	27.0	-
Range	2-54	-	-	-
< 18	22/301	7.3	7.0	4.4 – 9.5
18-24	96/301	31.9	30.3	24.9 – 35.4
25-34	122/301	40.5	41.8	35.6 – 48.3
35-44	56/301	18.6	19.5	14.2 – 24.8
≥ 45	5/301	1.7	1.5	0.5 – 2.4
<b>Length of time <u>injecting</u> illicit drugs</b>				
Mean	11.98	-	11.8	-
SD	8.0	-	7.9	-
Median	11.0	-	11.0	-
Range	0-37	-	-	-
≤ 1 year	14/305	4.6	5.3	2.2 – 8.6
2-5 years	59/305	19.3	19.3	14.6 – 23.8
6-10 years	74/305	24.3	25.2	20.0 – 30.5
11-20 years	113/305	37.0	35.7	29.2 – 42.2
> 20 years	45/305	14.8	14.5	10.5 – 18.3

Table 192: Alcohol and drug use, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Frequency of injecting drugs in the past 12 months</b>				
Once a month or less	109/324	33.6	34.1	28.9 – 39.4
2-4 times a month	98/324	30.2	28.8	23.7 – 33.8
2-3 times a week	61/324	18.8	18.1	13.7 – 22.4
≥ 4 times a week	56/324	17.3	19.0	14.4 – 23.8
<b>Type of drug injected most often</b>				
Heroin	325/326	99.7	99.8	99.5 – 100.0
Cocaine	1/326	0.3	0.2	0.0 – 4.6
Churus/Ash	14/326	4.3	4.4	2.0 – 6.7
Metaamphetamine	0/326	-	-	-
Ganja Mal	15/326	4.6	4.4	2.2 – 6.5
Kerala Ganja	35/326	10.7	11.1	7.7 – 14.6
Sudol (tablet)	23/326	7.1	7.5	4.5 – 10.5
Rifenol (tablet)	13/326	4.0	3.7	1.4 – 6.0
Other <sup>113</sup>	3/326	0.9	0.8	0.1 – 1.4

### 10.1.22 Location for obtaining and injecting drugs

The most commonly reported location for obtaining drugs is another PWID's house (69.5%), a drug dealer's house (28.9%), or their own home (participant's house) (22.3%) (Table 193). The actual location for injecting follows a similar trend, with the most common locations as follows: another PWID's house (57.5%), the participant's house (56.4%), and abandoned buildings (21.2%).

Table 193: Location for obtaining and injecting drugs, PWID Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Location for obtaining drugs</b>				
Participant's house	80/326	24.5	22.3	17.4 – 27.0
Another PWID's house	219/326	67.2	69.5	64.6 – 74.6
Drug dealer's house	97/326	29.8	28.9	23.8 – 33.7
Abandoned building	50/326	15.3	15.4	11.8 – 19.9
Public restroom	7/326	2.1	2.1	0.6 – 3.5
Prison	2/326	0.6	0.5	0.0 – 1.1
Street/park/beach	9/326	2.8	2.6	1.0 – 4.1
Shop/café/bar	2/326	0.6	0.6	0.0 – 1.3
Workplace	5/326	1.5	1.2	0.1 – 2.1
<b>Location for injecting drugs</b>				
Participant's house	188/326	57.7	56.4	50.7 – 61.8
Another PWID's house	185/326	56.7	57.5	51.8 – 63.3
Drug dealer's house	10/326	3.1	3.1	1.3 – 5.0
Abandoned building	68/326	20.9	21.2	17.0 – 25.5
Public restroom	6/326	1.8	1.8	0.4 – 3.1
Prison	1/326	0.3	0.3	0.0 – 0.7
Street/park/beach	7/326	2.1	2.0	0.7 – 3.4
Shop/café/bar	2/326	0.6	0.6	0.0 – 1.3
Workplace	4/326	1.2	1.0	0.0 – 1.9

<sup>113</sup> Other: Corex (n=1), Morphine (n=2)

### 10.1.23 Availability and use of clean needles and syringes

More than half of all PWID in Colombo have ever shared needles or syringes (53.9%), with only a quarter (25.7%) cleaning needles and syringes used by others every time, and most (36.7%) never cleaning them (Table 194). The most common type of cleaner used is hot water (53.5%), cold water (25.4%) or cotton (23.1). Interestingly, most PWID reported that they can obtain a new needle and syringe every time they inject (92.3%). Of the few who indicate this is not possible (1.7%), the barriers include no need (87.4%), and the vendor/needle sellers being closed (6.0%). The most common place to obtain a new needle/syringe is a pharmacy (91.3%), and most common place for disposal is a trashcan (48.7%) or on the ground/in water (43.8%)

**Table 194: Availability and use of clean needles, PWID Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever shared needles/syringes</b>				
Yes	179/326	54.9	53.9	48.4 – 59.3
<b>Cleans needles/syringes used by others</b>				
Every time	48/177	27.1	25.7	17.5 – 33.8
Most of the time	22/177	12.4	11.3	7.1 – 15.4
Sometimes	39/177	22.0	21.5	14.6 – 28.3
Rarely	8/177	4.5	4.8	2.0 – 7.6
Never	60/177	33.9	36.7	29.3 – 44.4
<b>Type of cleanser used</b> (multiple answers possible)				
Cold water	29/117	24.8	25.4	17.2 – 33.7
Hot water	63/117	53.8	53.5	42.9 – 64.0
Soap	13/117	11.1	11.0	4.9 – 17.0
Saliva	1/117	0.9	0.8	0.7 – 1.0
Urine	0/117	-	-	-
Soda/Soft drinks	0/117	-	-	-
Alcohol	0/117	-	-	-
Bleach	0/117	-	-	-
Cotton	27/117	23.1	23.0	13.3 – 32.8
Don't know	2/117	1.7	1.2	0.0 – 2.7
Other <sup>114</sup>	8/117	6.8	6.8	2.2 – 11.4
<b>Can obtain new/unused needle and syringe every time they need it</b>				
Yes	295/326	90.5	92.3	88.1 – 94.4
No	6/326	1.8	1.7	0.4 – 2.9
Have not tried	25/326	7.7	7.1	4.3 – 9.8
<b>Barriers to obtaining clean needles/syringes</b> (multiple answers possible)				
Too expensive	1/30	3.3	3.3	0.0 – 7.9
Vendor/Needle seller closed	2/30	6.7	6.0	4.3 – 7.6
Preferred size not available	1/30	3.3	3.3	2.0 – 4.7
Vendor ran out/Stock out	0/30	-	-	-
Vendor too far away	0/30	-	-	-
Do not know where to get	0/30	-	-	-
No need	26/30	86.7	87.4	79.5 – 95.3
Retailers refuse to sell to me	1/30	3.3	3.3	2.0 – 4.7

<sup>114</sup> Other: Cloth (n=1), cologne (=1), lemon juice (n=3), lime juice (n=1), surgical spirit (n=1), wash with petroleum then water (n=1)

Table 194: Availability and use of clean needles, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Places to obtain new/unused needles/syringes</b> (multiple answers possible)				
Pharmacy	270/295	91.5	91.3	88.5 – 94.1
Chemist's shop	1/295	0.3	0.8	0.8 – 1.0
Drug dealer	11/295	3.7	3.9	1.7 – 6.2
Another PWID	5/295	1.7	1.6	0.5 – 2.6
Health worker	3/295	1.0	0.9	0.0 – 1.9
Drop-in centre	1/295	0.3	0.3	0.0 – 1.9
Family member/Relative/Spouse	0/295	-	-	-
Sex partner	2/295	0.7	0.6	0.0 – 1.2
Friend/s	2/295	0.7	0.6	0.0 – 1.5
<b>Mode of disposing of needles/syringes</b> (multiple answers possible)				
Give it to needle exchange	6/326	1.8	1.8	0.5 – 3.1
Pass it onto another person	20/326	6.1	5.9	3.6 – 8.2
Throw it in the trash/can	159/326	48.8	48.7	43.2 – 54.0
Toss it on the ground/in the water	145/326	44.5	43.8	38.1 – 49.3
Bury it	28/326	8.6	9.1	5.8 – 12.5
Destroy it	29/326	8.9	8.3	5.3 – 11.2
Don't know	2/326	0.6	0.6	0.0 – 1.1

### 10.1.24 Use of drugs in prison

Nearly all PWID have been arrested for injecting drugs (99.9%), with the number of times ranging from one to six or more, with two arrests being the most frequent (31.3%) (Table 195). Under a fifth (15.5%) of PWID have also injected while in prison, and of those over two thirds shared needles/syringes when doing so.

Table 195: Use of drugs in prison, PWID Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever arrested for injecting drugs</b>				
Yes	246/247	99.6	99.9	99.8 – 100.0
<b>Number of times arrested for injecting drugs</b>				
Mean	3.6	-	3.6	-
SD	3.2	-	3.2	-
Median	3.0	-	3.0	-
Range	1-20	-	-	-
1	43/246	17.5	18.1	12.4 – 23.8
2	76/246	30.9	31.3	25.4 – 37.1
3	43/246	17.5	17.2	12.4 – 21.9
4	25/246	10.2	10.2	6.8 – 13.6
5	27/246	11.0	9.7	6.5 – 12.8
6 or more	32/246	13.0	13.6	8.6 – 18.8



Table 195: Use of drugs in prison, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates		
	n/N	%	%	95% CI	
<b>Injected drugs in jail/prison</b>	Yes	54/326	16.6	15.5	11.5 – 19.4
	No	247/326	75.8	76.3	71.7 – 80.9
	Never been to jail	25/326	7.7	8.2	5.3 – 11.1
<b>Shared needles/syringes with others in jail/prison</b>	Yes	34/54	63.0	67.4	55.4 – 80.0

### 10.1.25 Most recent experience of injecting drugs with another person

More than two thirds of PWID have ever injected drugs with someone else (64.2%) (Table 196). Just over three quarters of PWID indicate using a clean, unused needle and syringe (71.4%) the last time they injected with someone; however, other high-risk behaviours are present including injecting from a pre-filled syringe (48.2%), frontloading/back loading/splitting (74.3%), flash bleeding (13.9%), and passing the needle on to others after use (79.2%). The last person they injected with is typically a friend/acquaintance (96.1%), with most (44.0%) believing this person's status to be HIV negative, although nearly the same amount were not sure (42.3%).

Table 196: Most recent experience of injecting drugs with another person, PWID Colombo

Characteristic	Sample proportions		Population estimates		
	n/N	%	%	95% CI	
<b>Ever injected drugs with someone</b>	Yes	212/326	65.0	64.2	58.6 – 69.7
<b>Last time they injected drugs with someone:</b>					
<b>A) Injected with a completely new, unused needle/syringe that no one else including you had used previously</b>	Yes	151/326 <sup>115</sup>	71.2	71.4	65.4 – 77.5
<b>B) Injected with a needle/syringe that was used previously by you and no one else</b>	Yes	122/212	57.5	55.8	48.9 – 62.5
<b>C) Used a needle/syringe after someone else had injected with it</b>	Yes	166/212	78.3	77.4	70.9 – 83.8
<b>D) Received an injection from a 'fixer', or injected from a pre-filled syringe</b>	Yes	101/210	48.1	48.2	40.1 – 56.4
<b>E) Injected using a syringe that someone else had squirted drugs into from his/her used syringe (frontloading/back loading/splitting)</b>	Yes	157/211	74.4	74.3	68.1 – 80.4

<sup>115</sup> This first question was asked of all respondents, but those to follow only if they reported injecting with someone before.

Table 196: Most recent experience of injecting drugs with another person, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>F) Injected blood from someone else who had recently injected drugs (flash blood)</b>				
Yes	27/209	12.9	13.9	8.5 – 19.3
<b>G) Passed on the needle/syringe to others after you injected with it</b>				
Yes	169/211	80.1	79.2	71.7 – 86.7
<b>Type of relationship with the last person they injected drugs with</b>				
Sex partner	5/211	2.4	2.4	0.3 – 4.5
Friend/Acquaintance	200/211	94.8	96.1	92.4 – 97.8
Relative	2/211	0.9	0.9	0.1 – 1.7
Drug Dealer	2/211	0.9	0.7	0.1 – 1.3
Fixer	2/211	0.9	0.9	0.0 – 2.2
Fellow prisoner	0/211	-	-	-
Stranger	0/211	-	-	-
<b>HIV status of the last person they injected drugs with</b>				
HIV-negative	93/211	44.1	44.0	37.3 – 50.8
HIV-positive	1/211	0.5	1.2	0.0 – 3.1
Indeterminate	28/211	13.3	12.5	7.7 – 17.3
Don't know	89/211	42.2	42.3	35.0 – 50.0

### 10.1.26 Most recent experience of injecting drugs

The last day PWID injected, over half injected once (55.9%), while over a third injected twice (36.7%) (Table 297). About half of PWID in Colombo did not share a needle or syringe on the last day they injected drugs (50.7%).

Table 197: Most recent experience of injecting drugs, PWID Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of times injecting drugs on the last day of injecting drugs</b>				
1	113/211	34.7	55.9	48.4 – 63.6
2	81/211	24.8	36.7	29.5 – 43.8
3	17/211	5.2	7.4	3.8 – 10.9
<b>Did not share needle or syringe at last day of injecting drugs</b>				
Yes	160/326	49.1	50.7	45.1 – 56.8

### 10.1.27 Blood safety

Nearly a third (30.7%) of PWID in Colombo have ever donated blood, typically with the last blood donation over one year ago (84.2%) (Table 198). Five percent (5.6%) were paid for their last blood donation. Over a third of PWID (41.2%) have ever gotten a tattoo or a piercing, with most receiving a new/unused needle (45.0%) at the time.

**Table 198: Blood safety, PWID Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever donated blood</b>				
Yes	104/326	31.9	30.7	25.7 – 35.7
<b>Last blood donation</b>				
In the last 6 months	5/103	4.9	5.6	1.1 – 10.1
6-12 months ago	10/103	9.7	10.2	1.6 – 18.9
More than 1 year ago	88/103	85.4	84.2	75.2 – 93.0
<b>Received money for the blood donation</b>				
Yes	6/104	5.8	5.0	2.2 – 7.8
<b>Ever gotten a tattoo or a piercing</b>				
Yes	139/326	42.6	41.2	36.1 – 46.2
<b>Last tattoo or piercing</b>				
In the last 6 months	2/139	1.4	1.4	1.2 – 1.5
6-12 months ago	5/139	3.6	3.6	1.3 – 5.9
More than 1 year ago	132/139	95.0	95.0	92.7 – 97.3

### 10.1.28 Media usage

TV is the most common media consumed with over three quarters (75.6%) of PWID watching TV once a week, most days, or every day, followed by radio (60.5% at same intervals), newspaper (24.0%) and finally the internet, with very low usage (18.8%). Fewer than half of all PWID have mobile phones (44.6%), although of those who do, more than three quarters (71.7%) use it to communicate with other PWID. More than two thirds of PWID, and a quarter of PWID, would be interested in receiving HIV and health related text messages (64.0%) and attending learning activities (79.6%).

**Table 199 Media usage, PWID Colombo**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Radio</b>				
Never	131/326	40.2	39.0	33.4 – 44.4
Once a month	2/326	0.6	0.6	0.0 – 1.3
Once a week	7/326	2.1	2.7	1.0 – 4.4
Most days	106/326	32.5	31.8	26.6 – 36.9
Every day	80/326	24.5	26.0	20.7 – 31.4
<b>TV</b>				
Never	84/326	25.8	24.4	19.6 – 29.0
Once a month	0/326	-	-	-
Once a week	10/326	3.1	2.7	1.2 – 4.2
Most days	121/326	37.1	37.4	31.7 – 43.2
Every day	111/326	34.0	35.5	30.5 – 40.7
<b>Newspaper</b>				
Never	244/326	74.8	74.4	69.2 – 79.5
Once a month	6/326	1.8	1.6	0.4 – 2.7
Once a week	19/326	5.8	6.1	3.6 – 8.7
Most days	35/326	10.7	9.8	6.5 – 13.0
Every day	22/326	6.7	8.1	0.5 – 11.5

Table 199 Media usage, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Internet</b>				
Never	313/326	96.0	95.1	92.1 – 97.9
Once a month	2/326	0.6	0.5	0.0 – 1.0
Once a week	3/326	0.9	0.9	0.2 – 1.5
Most days	3/326	0.9	1.6	0.0 – 3.9
Every day	5/326	1.5	1.9	0.1 – 3.8
<b>Has a mobile phone</b>				
Yes	142/326	43.6	44.6	38.3 – 50.9
<b>Uses mobile phone to communicate with other PWID</b>				
Yes	102/142	71.8	71.7	63.5 – 79.8
<b>Interested in receiving HIV and health-related text messages</b>				
Yes	94/142	66.2	64.0	55.8 – 72.0
<b>Interested in attending learning activities</b>				
Yes	256/326	78.5	79.6	75.5 – 84.0

### 10.1.29 Network size and multiplier questions

PWID in Colombo estimate the average number of PWID living in Colombo to be 994, of whom 778 are above the age of 18 (Table 200) With regard to multiplier questions, over three quarters (74.9%) have been arrested for possession of illegal drugs and 64.8% have been in prison for possession of illegal drugs; the data presented in this table would ideally have been used by the NSACP to undertake a multiplier PSE, unfortunately combined data for all prisons was not produced, and therefore a multiplier question not undertaken.

Table 200: Network size and multiplier questions, PWID Colombo

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Estimation of the number of PWID who live in Colombo</b>	255/326			
Mean	1,032.3	-	993.7	-
SD	2,823.3	-	2,676.7	-
Median	600.0	-	600.0	-
Range	3 – 3,000	-	-	-
<b>Estimation of the number of PWID older than 18 who live in Colombo</b>	228/326			
Mean	792.1	-	778.2	-
SD	1,164.0	-	1,122.4	-
Median	577.5	-	590	-
Range	3 - 15,000	-	-	-

Table 200: Network size and multiplier questions, PWID Colombo (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>*Number of PWID older than 18 seen in the last month</b>	326/326			
Mean	8.23	-	7.4	-
SD	2.9	-	2.5	-
Median	8.0	-	8.0	-
Range	2 – 30	-	-	-
<b>Ever arrested for injecting drugs or being in possession of drugs?</b>				
Yes	249/326	76.4	74.9	69.6 – 79.9
<b>Arrested for injecting drugs in 2014 in Colombo</b>				
Yes	65/326	19.90	18.3	14.1 – 22.2
<b>Ever in prison for injecting drugs or being in possession of drugs</b>				
Yes	219/326	67.2	64.8	59.1 – 70.3
<b>Been in prison in 2014</b>				
Yes	51/326	15.6	14.4	10.8 – 18.0
<b>Arrested for injecting drugs in 2014 in Colombo</b>				
Yes	65/326	19.90	18.3	14.1 – 22.2

## 10.2 PWID summary analysis of key variables

A summary of key variables for PWID is presented in Table 201.

Table 201: PWID summary analysis key variables

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>HIV</b>	0/326	-	-	--
<b>Active Syphilis</b>	0/326	-	-	--
<b>Composite knowledge</b>	101/307	32.9	33.3	27.5 – 39.1
<b>Used a condom with last sex sexual partner</b>	75/290	25.9	24.0	18.8 – 28.9
<b>Tested for HIV in the past 12 months and knows result</b>	27/326	8.3	8.7	5.8 – 11.8
<b>Received free condoms from NGOs or a health care center in the last 12 months</b>	19/320	5.9	6.0	3.5 – 8.5
<b>Reached with HIV prevention programs (received free condoms and know where HIV testing can be obtained)</b>	14/326	4.3	4.1	2.2 – 6.1
<b>Unsafe injecting practices (shared injecting equipment at last day of injecting drugs)</b>	166/326	50.9	49.3	43.5 – 55.0

### 10.3 PWID multivariate analysis

Using a logistic regression analysis, comparison of factors associated with outcomes was undertaken: using a condom at last sex, having an HIV test in the past 12 months and knowing the results, reached with prevention programs, and sharing injecting equipment. The variables used as correlates are presented in the tables. Individualized RDS weights for bivariate (unadjusted OR) and multivariate (adjusted OR) were exported from RDS-Analyst using a Gile'sSS estimator. Proportions (n/N) and percentage (%) among groups is shown without RDS weights. Cases with missing values were excluded from the analysis.

Independent factors associated with having an HIV test in the last 12 months include older ages (aged 35 and over: AOR 16.32), composite HIV knowledge (AOR 8.48) and having sex with men in the last 12 months (AOR 5.55). PWID with higher levels of education have lower odds of having an HIV test in the last 12 months and receiving the result (AOR 0.6).

**Table 202: Factors associated with having an HIV test in the last 12 months and knowing the result, PWID Colombo**

	HIV test in the past 12 months		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	27/326	8.3	-	-
<b>Age</b>				
<35	3/108	2.8	1.0	1.0
≥ 35	24/218	11.0	3.69*** (2.54 – 5.46)	16.32*** (7.8 – 34.3)
<b>Level of Education</b>				
≤ Grade 10	22/252	8.7	1.0	1.0
≥ Passed O/L	5/74	6.8	0.69* (0.49 – 0.96)	0.6* (0.37 – 0.99)
<b>Monthly income</b>				
≤20.000	11/92	12.0	1.0	1.0
>20.000	16/231	6.9	0.60*** (0.64 – 0.78)	0.94 (0.63 – 1.39)
<b>Number of all sexual partners in the last 12 months</b>				
0-1	12/125	9.6	1.0	1.0
2-6	15/201	7.5	0.85 (0.66 – 1.10)	1.89* (1.15 – 3.10)
<b>Had sex with men in the last 12 months</b>	7/48	14.6	3.76*** (2.73 – 6.17)	5.55*** (3.65 – 8.49)
<b>Ever received money, goods or services in exchange for sex</b>	0/23	0.0	-	-
<b>Composite GARP knowledge (all correct)</b>	12/101	11.9	2.45*** (1.87 – 3.20)	8.48*** (5.6 – 12.96)
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>	4/19	21.1	3.66*** (2.51 – 5.36)	3.27*** (1.59 – 6.73)

Table 202: Factors associated with having an HIV test in the last 12 months and knowing the result, PWID Colombo (Continued)

	HIV test in the past 12 months		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Contact with a health peer educator in the community in the last 6 months</b>	5/14	35.7	7.65*** (5.18 – 11.29)	5.5*** (2.77 – 10.93)
<b>Condom used with last sexual partner</b>	5/75	6.7	0.99 (0.69 – 1.42)	0.67 (0.43 – 1.05)
<b>Shared needle or syringe at last day of injecting drugs</b>	16/166	9.6	1.61*** (1.24 – 2.09)	0.73 (0.5 – 1.09)

Amongst PWID in Colombo, independent factors associated with condom use with last sexual partner include receiving free condoms in the last 12 months (AOR 5.10) and ever having received money, goods or services in exchange for sex (AOR 3.66).

Table 203: Factors associated with condom use with last sexual partner, PWID Colombo

	Condom use with last sexual partner		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	75/290	25.9		
<b>Age</b>				
18 – 24	10/27	37.0	1.0	1.0
25 – 34	17/73	23.3	0.68* (0.49 – 0.93)	1.04 (0.68 – 1.59)
35 – 44	24/83	28.9	0.87 (0.64 – 1.19)	1.93** (1.27 – 2.92)
≥ 45	24/107	22.4	0.57*** (0.42 – 0.78)	1.11 (0.73 – 1.70)
<b>Education</b>				
≤ Grade 10	56/219	25.6	1.0	1.0
≥ Passed O/L	19/71	26.8	1.08 (0.88 – 1.33)	1.04 (0.81 – 1.33)
<b>Monthly income</b>				
≤20.000	19/78	24.4	1.0	1.0
>20.000	54/209	25.8	1.09 (0.89 – 1.33)	0.84 (0.67 – 1.05)
<b>Type of last sexual partner</b>				
Regular	31/151	20.5	1.0	1.0
Casual	21/67	31.3	1.52*** (1.22 – 1.91)	1.74*** (1.35 – 2.24)
One Time Only	23/71	32.4	1.65*** (1.33 – 2.05)	1.29 (1.0 – 1.68)
<b>Number of all sexual partners in the last 12 months</b>				
0-1	16/90	17.8	1.0	1.0
2-6	59/200	29.5	2.14*** (1.74 – 2.65)	1.61*** (1.25 – 2.07)
<b>Had sex with men in the last 12 months</b>	16/48	33.3	1.40** (1.11 – 1.76)	1.3 (0.99 – 1.72)

Table 203: Factors associated with condom use with last sexual partner, PWID Colombo (Continued)

	Condom use with last sexual partner		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
Ever received money, goods or services in exchange for sex	11/23	47.8	3.67*** (2.74 – 4.91)	3.66*** (2.53 – 5.29)
Composite GARP knowledge (all correct)	29/98	29.6	1.46*** (1.21 – 1.75)	1.63*** (1.31 – 2.03)
Received free condoms from NGOs or a health care centre in the last 12 months	11/17	64.7	6.19*** (4.37 – 8.75)	5.10*** (3.27 – 7.93)
Contact with a health peer educator in the community in the last 6 months	5/13	38.5	1.88** (1.25 – 2.81)	0.89 (0.52 – 1.50)
Shared needle or syringe at last day of injecting drugs	40/142	28.2	1.42*** (1.18 – 1.69)	1.05 (0.83 – 1.31)
HIV test in the last 12 months and knows the result	5/19	26.3	0.99 (0.69 – 1.42)	0.62* (0.41 – 0.96)

Independent factors associated with sharing needles include condom use with last sexual partner (AOR 1.44) and composite HIV knowledge (AOR 1.44). Multiple factors have lower odds of sharing needles on the last day of injection, including age (aged 45 and over: AOR 0.47, 25-34: AOR 0.38, and aged 35-44: AOR 0.36).

Table 204: Factors associated with sharing needles at last day of injecting drugs, PWID Colombo

	Shared needle or syringe at last day of injecting drugs		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	160/326	49.1		
<b>Age</b>			1.0	1.0
18 – 24	20/28	71.4		
25 – 34	36/80	45.0	0.42*** (0.31 – 0.56)	0.38*** (0.28 – 0.53)
35 – 44	45/92	48.9	0.48*** (0.36 – 0.63)	0.36*** (0.26 – 0.5)
≥ 45	65/126	51.6	0.61** (0.46 – 0.81)	0.47*** (0.34 – 0.65)
<b>Education</b>			1.0	1.0
≤ Grade 10	142/252	56.3		
≥ Passed O/L	24/74	32.4	0.37*** (0.30 – 0.44)	0.29*** (0.24 – 0.36)
<b>Monthly income</b>			1.0	1.0
≤20,000	47/92	51.1		
>20,000	116/231	50.2	1.01 (0.86 – 1.18)	0.96 (0.80 – 1.14)
<b>Composite GARP knowledge (all correct)</b>	55/101	54.5	1.10 (0.94 – 1.29)	1.44*** (1.21 – 1.73)



Table 204: Factors associated with sharing needles at last day of injecting drugs, PWID Colombo (Continued)

	Shared needle or syringe at last day of injecting drugs		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
Contact with a health peer educator in the community in the last 6 months	6/14	42.9	0.91 (0.63 – 1.30)	0.81 (0.53 – 1.23)
HIV test in the last 12 months and knows the result	16/27	59.3	1.61*** (1.24 – 2.09)	1.07 (0.76 – 1.50)
Condom used with last sexual partner	40/75	53.3	1.42*** (1.18 – 1.69)	1.44*** (1.18 – 1.75)

Independent factors associated with prevention programme reach include 2-6 sexual partners in the last 12 months (AOR 6.29), aged 35 or older (AOR 4.61) and higher education (passed O Levels: AOR 2.22).

Table 205: Factors associated with prevention programme reach (been given condoms in last 12 months and know where to go for an HIV test), PWID Colombo

	Reached by prevention program		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	14/323	4.3		
<b>Age</b>				
<35	3/107	2.8	1.0	1.0
≥ 35	11/216	5.1	2.23** (1.41 – 3.55)	4.61*** (2.48 – 8.56)
<b>Level of education</b>				
≤ Grade 10	9/249	3.6	1.0	1.0
≥Passed O/L	5/74	6.8	1.82** (1.24 – 2.67)	2.22** (1.38 – 3.58)
<b>Monthly income</b>				
≤20.000	4/89	4.5	1.0	1.0
>20.000	10/231	4.3	1.04 (0.70 – 1.56)	1.01 (0.62 – 1.66)
<b>Number of all sexual partners in the last 12 months</b>				
0-1	3/123	2.4	1.0	1.0
2-6	11/200	5.5	1.98** (1.31 – 3.0)	6.29*** (3.0 – 13.09)
<b>Even had anal sex with men</b>	3/48	6.2	1.28 (0.76 – 2.15)	0.95 (0.56 – 1.62)
<b>Ever received money, goods or services in exchange for sex</b>	1/23	4.3	1.12 (0.54 – 2.3)	-

# Beach Boys



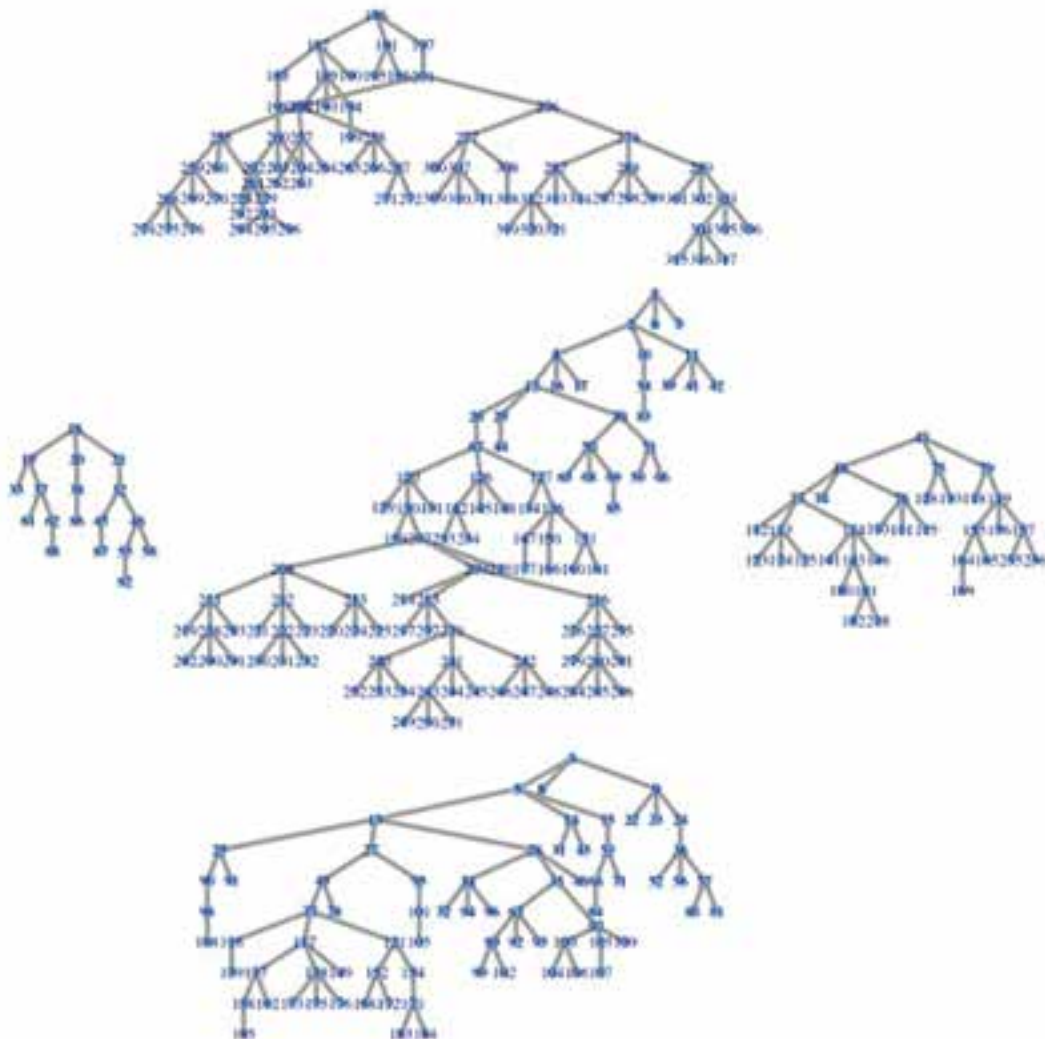
## 11. Beach boys

A total of 306 BB, including five seeds were surveyed at the Galle data collection site and through mobile IBBS Survey team visits. Seeds were established from various BB areas including the Pannangoda Area and Hikkaduwa/Vaulagoda Areas. The Gile's SS estimator was used with a population size estimate of 1,053 (low estimate of 306, and high estimate of 1,800), 0.95 confidence interval and 5000 bootstraps.

### 11.1.1 Network properties

Although five 5 seeds were recruited, most of the recruitment came from three seeds, as shown in Figure 25. A total of 14 waves were reached. Network sizes of all participants who reported a network size larger than the 95th percentile value of 20 were lowered to 20 (one participant reported a network sizes of 950, one participant reported 1,750, three participants reported 30, and two participants reported 25). Furthermore, 104 participants (34.0%) did not report a network size, and were imputed with the median value of 6. The strength of the association between network size question in the questionnaire and the dedicated network size form completed by the coupon manager was moderately strong, with a Pearson Correlation Coefficient of  $r = .49$  ( $p < .01$ ).

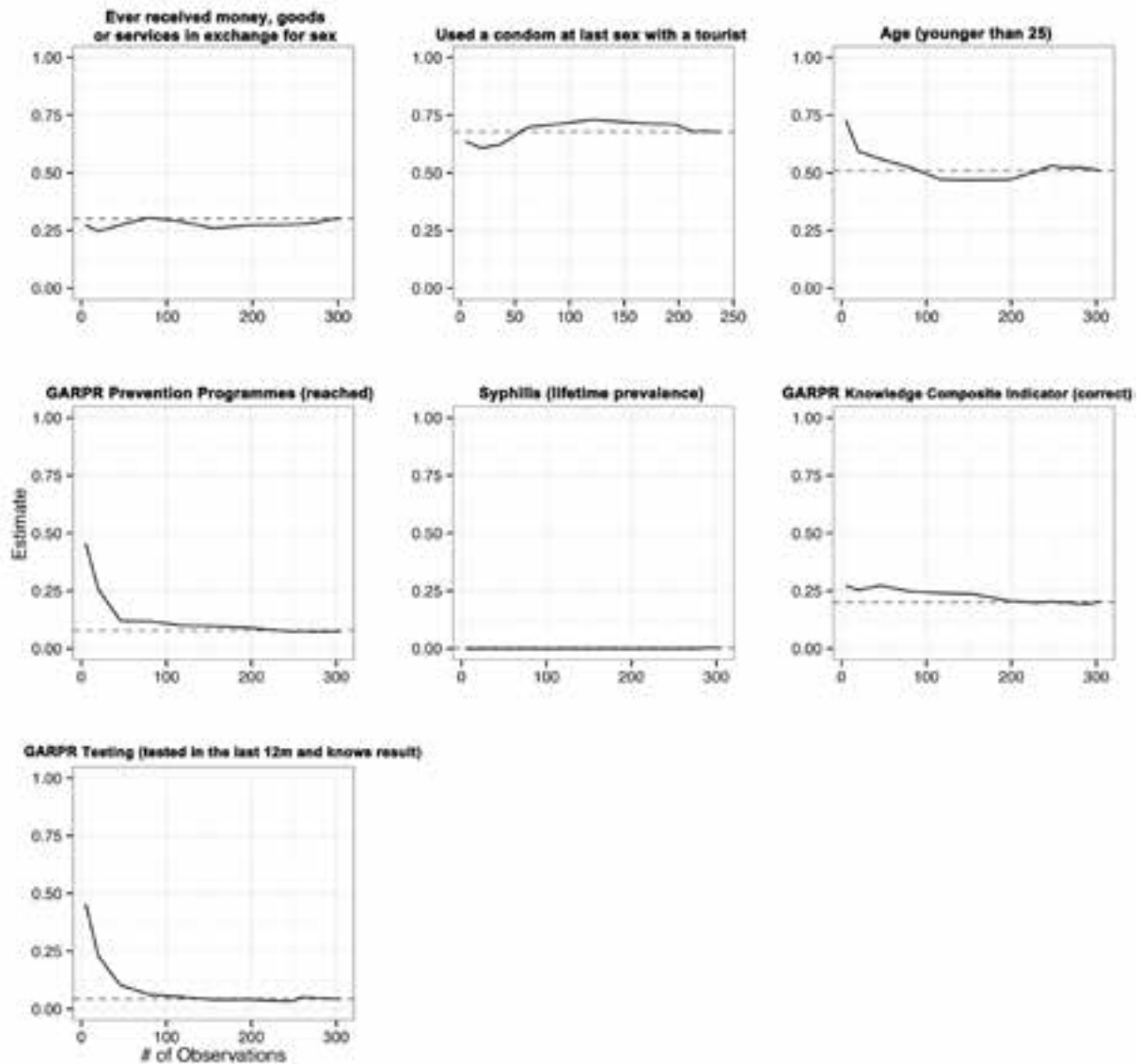
**Figure 25: Recruitment tree, BB Galle**



### 11.1.2 Convergence

Convergence was reached on all key indicators (Figure 26).

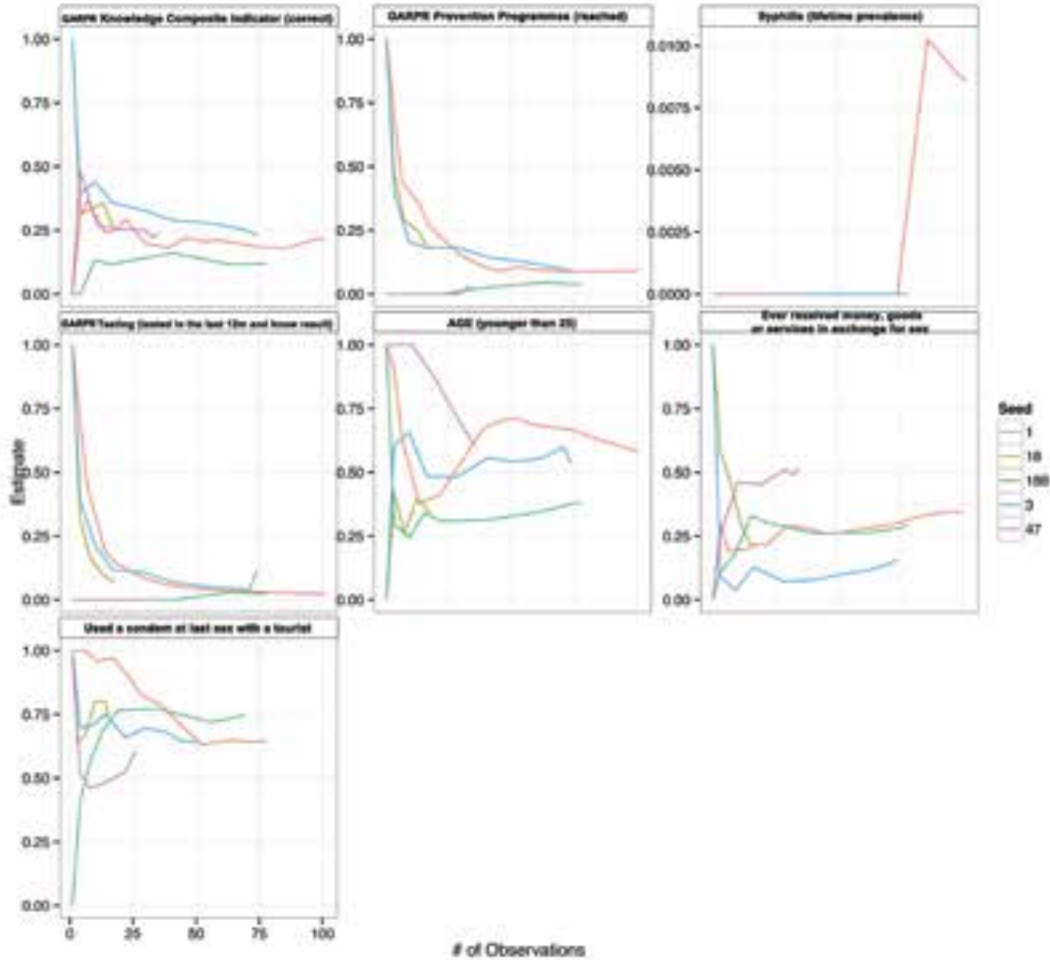
Figure 26: Convergence on key indicators, BB Galle



### 11.1.3 Bottleneck plots

There is no strong evidence of bottlenecks (Figure 27). Some seeds have diverged to an older age group and some more into those who exchanged sex, however the overall estimator is stable.

**Figure 27: Bottleneck plots, BB Galle**



**11.1.4 Homophily**

Homophily amongst BB in Galle ranges from 1.01 to 1.66 (Table 206). Two variables show higher homophily, including the GARPR prevention programmes and testing indicators, and therefore show signs of some recruitment bias to those similar to oneself.

**Table 206: Homophily, BB Galle**

Indicator	Recruitment homophily	Estimated population homophily
HIV	-	-
Active syphilis	-	-
Used a condom at last sex with a client	0.98	1.01
Received free condoms from NGOs or a health care centre in the last 12 months and know where to obtain an HIV test	1.03*	1.38
Correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	0.95	1.03
Tested for HIV in the past 12 months and knows result	1.02*	1.66

### 11.1.5 Study and recruiter information

The main reason for participation in the survey amongst BB in Galle was for the HIV test (90.2%) (Table 207). All respondents received their coupon from a friend or acquaintance whom they had predominantly known for over a year (88.7%). The screener was confident that all respondents were genuine members of the target population.

**Table 207: Study and recruiter information, BB Galle**

Characteristic	Sample proportions	
	n/N	%
<b>Main reason for participation in the study</b>		
Interest in HIV and sexual health	12/306	3.9
HIV test	276/306	90.2
Interest in issues related to BB	0/306	-
Helping the community	0/306	-
Friend wanted me to participate	15/306	4.9
Someone forced me	0/306	-
Incentive/Gift	3/306	1.0
<b>Mode of receiving the coupon*</b>		
From a friend/acquaintance	301/301 <sup>116</sup>	100
Found it	0/301	-
Bought it/Exchanged it for something	0/301	-
<b>Length of time they knew the person who gave them the coupon</b>		
< 6 months	12/300	4.0
6 months – 1 year	22/300	7.3
> 1 year	266/300	88.7
<b>Screener's confidence that participant is a BB</b>		
Confident	306/306	100
Somewhat confident	0/306	-
Not confident	0/306	-

### 11.1.6 Biological test results

There were no cases of HIV or syphilis amongst BB in Galle; however, there was one case of non-active syphilis (Table 208).

**Table 208: Biological test results, BB Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
HIV - Active	0/306	-	-	-
Syphilis - Active	0/306	-	-	-
Syphilis – Non-Active	1/306	0.3	-	-
Syphilis – Total (active and non-active)	0/306	-	-	-

<sup>116</sup> Seeds not included as these coupons were purposefully distributed by the IBBS survey team

### 11.1.7 Socio-demographic characteristics

The average age of BB in Galle is 27.2 with over half of the population (51.1%) under the age of 25. BB in Galle are male by birth (100.0%), born in Sri Lanka (100.0%), and are predominantly Sinhalese (99.7%) (Table 209). Nearly all BB are residents of Galle (98.3%), have lived in Galle for more than one year (99.2%), and speak Sinhalese (100.0%). Literacy is high (98.2%) and the highest level of education is typically O Levels (45.8%). Few BB in Galle are students (4.0%). The average monthly personal income is between 20,001 and 30,000 rupees, which supports on average 2.4 persons in addition to themselves. The typical occupation is waiter/bartender/hotel employee (39.6%), followed by tourism/travel agent/tour guide (32.0%).

**Table 209: Socio-demographic characteristics, BB Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Age</b>				
Mean	27.0	-	27.2	-
SD	8.5	-	8.6	-
Median	24.0	-	24.0	-
Range	18 – 56	-	-	-
<b>Age groups (years)</b>				
Aged under 20	32/306	10.5	10.3	6.5 – 14.1
Aged under 25	161/306	52.6	51.1	45.0 – 56.7
18 – 24	161/306	52.6	51.1	45.0 – 56.7
25 – 34	96/306	31.4	32.4	27.1 – 38.2
35 – 44	28/306	9.2	9.2	6.0 – 12.3
≥ 45	21/306	6.9	7.3	4.8 – 10.0
<b>Sex</b>				
Male	306/306	100	100	-
<b>Sex same as at birth</b>				
Yes	306/306	100	100	-
<b>Citizenship</b>				
Sri Lankan	306/306	100	100	-
<b>Country of birth</b>				
Sri Lanka	306/306	100	100	-
<b>Ethnicity</b>				
Sinhalese	305/306	99.7	99.7	99.2 - 100
Sri Lankan Tamil	0/306	-	-	-
Indian Tamil	0/306	-	-	-
Moor	0/306	-	-	-
Burgher	0/306	-	-	-
Malay	0/306	-	-	-
Other (Muslim)	1/306	0.3	0.3	0 – 0.8
<b>District of residence during the past one year</b>				
Galle	302/306	98.7	98.3	96.5 – 99.9
Other <sup>117</sup>	4/306	1.3	1.7	0.02 – 3.5

<sup>117</sup> Other: Colombo (n=1), Kandy (n=1), Matara (n=1)

Table 209: Socio-demographic characteristics, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Length of time lived in Galle</b>				
< 1 year	1/305	0.3	0.8	0 - 2.2
≥ 1 year	304/305	99.7	99.2	97.8 - 100
<b>Primary residence</b>				
Galle	287/306	93.8	93.8	91.2 - 96.5
Other (Anuradhapura)	19/306	6.2	6.2	3.5 - 8.8
<b>Language spoken at home</b> (multiple answers possible)				
Sinhalese	306/306	100	100	-
Tamil	0/306	-	-	-
English	3/306	1.0	1.0	0.02-2.0
<b>Literate</b>				
Yes	300/306	98.0	98.2	97.0 - 99.5
<b>Highest level of education</b>				
Never attended school	0/306	-	-	-
Grade 1-5	9/306	2.9	2.7	1.1 - 4.2
Grade 6-10	90/306	29.4	30.2	24.3 - 36.3
Passed O/L	144/306	47.1	45.8	40.2 - 50.9
Passed A/L	61/306	19.9	20.8	16.0 - 26.0
Completed Diploma	0/306	-	-	-
Completed Degree	2/306	0.7	0.5	0 - 1.1
<b>Currently a student</b>				
Yes	11/306	3.6	4.0	1.7 - 6.5
<b>Type of institution enrolled in</b> (among current students)				
University	3/11	27.3	18.9	0 - 36.2
Technical College	1/11	9.1	7.7	0 - 20.1
Vocational School	3/11	27.3	18.9	0 - 36.2
Other <sup>118</sup>	4/11	36.4	48.6	21.1 - 80.4
<b>Monthly personal income</b>				
< 5,000 Rupees	4/286	1.4	1.1	0.08 - 2.1
5,000-10,000	7/286	2.4	2.6	0.9 - 4.3
10,001-20,000	63/286	22.0	22.1	17.4 - 26.9
20,001-30,000	120/286	41.0	41.7	36.0 - 47.4
30,001-40,000	47/286	16.4	15.2	11.6 - 18.5
40,000Don't know	26/286	9.1	10.2	6.2 - 14.5
	19/286	6.6	7.0	3.9 - 10.3

<sup>118</sup> Other: Driving school (n=1), Mid way in Galle (n=1), school (n=1)



Table 209: Socio-demographic characteristics, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of people dependent on that income</b>				
Mean	2.4	-	2.4	-
SD	1.9	-	1.9	-
Median	2.0	-	2.0	-
Range	0 – 15	-	-	-
0	28/305	9.2	8.3	5.5 – 10.6
1	115/305	37.7	38.2	32.2 – 44.6
2	26/305	8.5	9.0	5.9 – 12.4
3	49/305	16.1	16.1	11.9 – 20.4
4	44/305	14.4	15.0	11.0 – 19.0
5 and more	43/305	14.1	13.4	9.5 – 17.0
<b>Occupation</b>				
Street vendor/casual labourer	4/299	1.3	1.5	0.2 – 3.0
Factory worker	4/299	1.3	1.2	1.5 – 2.1
Professional/banker/accountant	1/299	0.3	0.3	0 – 0.6
Teacher	0/299	-	-	-
Business owner	8/299	2.7	3.0	1.3 – 5.0
Hairdresser/beautician/masseuse	3/299	1.0	1.0	0.02 – 1.9
Waiter/bartender/hotel employee	117/299	39.1	39.6	34.0 – 45.4
Musician/dancer/performer	1/299	0.3	0.3	0 – 0.7
Tourism/Travel agent/tour guide	98/299	32.8	32.0	26.3 – 37.1
Government worker	0/299	-	-	-
Security guard	2/299	0.7	0.7	0 – 1.5
Fisherman/seafarer	16/299	5.4	4.7	2.4 – 6.7
Farmer/Agriculture worker	1/299	0.3	0.3	0 – 0.8
Taxi driver/Three wheeler driver	25/299	8.4	8.9	5.4 – 12.6
Diving	4/259	1.3	1.2	0.2 – 2.2
Unemployed	3/299	1.0	1.0	0 – 1.9
Other <sup>119</sup>	12/299	4.0	4.4	2.1 – 6.9

Most BB in Galle are single and have never been married (63.5%), and live with their parents (62.0%), siblings (37.5%) or spouse (31.5%) (Table 210). Just over a quarter (28.4%) of BB in Galle have between one and 6 children, with most having one child (39.5%).

<sup>119</sup> Other: Surfing teacher (n=2), actor in TV ads (n=1), carnival organizer (n=1), insurance agent (n=1), chef (n=1), fabric business (n=1), photographer (n=1), surfer (n=1), technician (n=1), gym employee (n=1), employee in an Internet café (n=1)

**Table 210: Marital status, living arrangements and children, BB Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Marital status</b>				
Single (never married)	203/306	66.3	63.5	56.5 – 69.2
Living together but not married	2/306	0.7	0.6	0.02 – 1.3
Married	100/306	32.7	35.5	29.8 – 42.6
Divorced/Separated	1/306	0.3	0.3	0 – 0.8
Widowed	0/306	-	-	-
<b>Mode of living</b> (multiple answers possible)				
Alone	16/306	5.2	5.6	3.1 – 8.2
With husband	90/306	29.4	31.5	26.0 – 37.7
With other sexual partner	4/306	1.3	1.1	0.2 – 2.0
With parents	192/306	62.7	62.0	56.1 – 67.7
With siblings	118/306	38.6	37.5	31.4 – 43.2
With children	60/306	19.6	21.8	16.7 – 27.8
With other family/relatives	6/306	2.0	2.2	0.6 – 3.8
With friend/roommate (not sexual partner)	4/306	1.3	1.2	0.2 – 2.2
With co-workers	1/306	0.3	0.4	0 – 0.8
<b>Type of residence</b>				
Temporary shelter	7/306	2.3	2.2	0.8 – 3.5
Boarding house	11/306	3.6	4.7	1.5 – 8.1
Parents' home	116/306	37.9	35.6	30.2 – 40.1
Their own home	168/306	54.9	56.3	51.5 – 61.8
Lodging	0/306	-	-	-
On the street	0/306	-	-	-
Brothel	0/306	-	-	-
Other	4/306	1.3	1.3	0.06 – 2.5
<b>Have children</b>				
Yes	82/306	26.8	28.4	22.8 – 34.6
<b>Number of children</b>				
1	29/82	35.4	39.5	27.2 – 53.5
2	25/82	30.5	29.9	13.7 – 46.0
3	19/82	23.2	21.0	6.4 – 34.9
4	5/82	6.1	4.2	0.6 – 7.1
5 or more	4/82	4.9	5.2	0 – 11.0

### 11.1.8 General sexual history

Nearly all BB in Galle have had sex with a woman (98.9%), but less than a quarter (16.1%) have had anal sex with a man (Table 211). The average age of first anal sex with a man is 20.1 years, with the partner being slightly older at 26.3 years. The mean number of sexual partners in the last seven days is 0.8, with casual partners at 1.1 and regular partners at 0.7.

**Table 211: General sexual history, BB Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever had sex with a <u>woman</u> (vaginal or anal)</b>				
Yes	303/306	99.0	98.9	97.7 – 99.9
<b>Ever had anal sex with a <u>man</u></b>				
Yes	52/306	17.0	16.1	11.9 – 19.8
<b>Age at first anal sex with a man</b>				
Mean	19.4	-	20.1	-
SD	4.7	-	5.8	-
Median	18.0	-	18.0	-
Range	14 – 45	-	-	-
<b>Age groups at first anal sex with a man</b>				
< 16	4/51	7.8	7.7	0.9 – 14.5
16 – 18	24/51	47.1	44.5	15.0 – 72.8
19 – 24	18/51	35.3	34.0	5.9 – 61.6
≥ 25	5/51	9.8	13.8	-
<b>Age of partner at first anal sex with a man</b>				
Mean	25.7	-	26.3	-
SD	9.5	-	9.9	-
Median	24.0	-	25.0	-
Range	12 – 52	-	-	-
<b>Age groups of partner at first anal sex with a man</b>				
< 16	6/49	12.2	12.1	4.1 – 20.1
16 – 18	6/49	12.2	9.4	3.2 – 14.3
19 – 24	13/49	26.5	27.0	13.8 – 40.5
≥ 25	24/49	49.0	51.5	38.3 – 65.7
<b>Number of <u>all</u> sexual partners in the last 7 days</b>				
Mean	0.9	-	0.8	-
SD	1.4	-	1.3	-
Median	0	-	0	-
Range	0 – 15	-	-	-
0	159/304	52.3	54.7	49.9 – 60.4
1	77/304	25.3	24.1	19.2 – 28.6
2	42/304	13.8	13.5	9.8 – 17.1
3 or more	26/304	8.6	7.7	5.1 – 10.0

Table 211: General sexual history, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of <u>casual</u> sexual partners in the last 7 days</b>				
Mean	1.1	-	1.1	-
SD	1.2	-	1.2	-
Median	1.0	-	1	-
Range	0 – 10	-	-	-
0	44/145	30.3	30.6	22.2 – 39.0
1	62/145	42.8	42.8	34.6 – 51.0
2	27/145	18.6	19.2	12.9 – 25.9
3 or more	12/145	8.3	7.4	3.6 – 10.7
<b>Number of <u>regular</u> sexual partners in the last 7 days</b>				
Mean	0.7	-	0.7	-
SD	1.0	-	1.0	-
Median	0	-	0	-
Range	1.0	-	-	-
0	81/145	55.9	55.9	46.3 – 65.2
1	41/145	28.3	29.0	21.0 – 37.5
2	15/145	10.3	9.1	4.1 – 13.5
3 or more	8/145	5.5	6.1	2.4 – 10.0
<b>Number of <u>all</u> sexual partners in the last 6 months</b>				
Mean	6.1	-	5.8	-
SD	6.4	-	6.2	-
Median	4.0	-	4.0	-
Range	0 – 50	-	-	-
0	1/306	0.3	0.3	0 – 0.8
1	43/306	14.1	14.9	11.3 – 18.8
2	57/306	18.6	19.1	15.1 – 23.3
3 – 5	98/306	32.0	34.1	29.0 – 40.0
6 or more	107/306	35.0	31.6	25.8 – 36.1
<b>Number of <u>casual</u> sexual partners in the last 6 months</b>				
Mean	4.6	-	4.4	-
SD	5.4	-	5.3	-
Median	3.0	-	3.0	-
Range	0 – 30	-	-	-
0	33/305	10.8	11.1	7.7 – 14.8
1	56/305	18.4	18.6	14.4 – 23.0
2	59/305	19.3	19.6	15.1 – 24.4
3 – 5	78/305	25.6	26.7	21.6 – 31.9
6 or more	79/305	25.9	24.0	19.0 – 28.3

Table 211: General sexual history, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Number of regular sexual partners in the last 6 months</b>				
Mean	1.5	-	1.5	-
SD	2.5	-	2.4	-
Median	1.0	-	1.0	-
Range	0 - 20	-	-	-
0	137/305	44.9	45.6	40.6 - 50.9
1	59/305	19.3	20.7	16.7 - 25.4
2	52/305	17.0	16.8	12.4 - 21.0
3 - 5	40/305	13.1	12.0	8.8 - 14.7
6 or more	17/305	5.6	4.9	2.8 - 6.7

### 11.1.9 Experience with sex work

Over a quarter (30.2%) of BB in Galle have ever received money, gifts or favours in exchange for sex, of those more than three quarters (86.3%) have done so in the last 12 months (Table 212). The sex of the last person with who they received money or goods for sex was predominantly female (79.5%), and a condom was used just under half the time (49.3%). A smaller number have ever paid for sex (21.6%) and of those who did most have done so in the last 12 months (93.8%), with a female (100.0%), and used a condom (60.0%).

Table 212: Experience with sex work, BB Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever received money, goods or services in exchange for sex</b>				
Yes	98/304	32.2	30.2	24.8 - 34.8
<b>Received money, goods or services in exchange for sex in the last 12 months</b>				
Yes (among those who ever sold sex)	85/98	86.7	86.3	76.8 - 95.6
Yes (among all)	85/306	27.8	25.9	21.1 - 30.1
<b>Sex of partner last time they received money, goods or services in exchange for sex</b>				
Female	79/98	80.6	79.5	71.5 - 87.1
Male	19/98	19.4	20.5	12.9 - 28.5
<b>Used a condom last time they received money, goods or services in exchange for sex</b>				
Yes	49/97	50.5	49.3	39.1 - 59.1
<b>Ever given money, goods or services in exchange for sex</b>				
Yes	74/304	24.3	21.6	16.7 - 25.5

Table 212: Experience with sex work, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Given money, goods or services in exchange for sex in the last 12 months</b>				
Yes (among those who ever paid for sex)	69/74	93.2	93.8	89.3 – 98.5
Yes (among all)	69/306	22.5	20.2	15.6 – 23.9
<b>Sex of partner last time they gave money, goods or services in exchange for sex</b>				
Female	74/74	100	100	-
Male	0/74	-	-	-
<b>Used a condom last time they gave money, goods or services in exchange for sex</b>				
Yes	44/71	62.0	60.1	46.7 – 72.8

#### 11.1.10 Sexual history with casual partners

Nearly all BB in Galle have had a casual sexual partner in the last six months (96.0%), which were predominantly female (87.5%) (Table 213). Over a third (35.2%) of BB in Galle used a condom every time with casual partners over the last 12 months. Their last casual partner was predominantly female (94.1%), and just over two thirds used a condom at last sex (67.1%). Typically the BB suggests condom usage (90.1%). Primary reasons for lack of condom usage include not being available (51.0%) and not thinking it necessary (30.0%). The most common places where their last casual partner was met include bar/café/disco/restaurant/nightclub (17.2%) and hotels (13.2%); however a large number of 'do not know' was reported for this question (41.2%)<sup>120</sup>. Nearly two thirds of BB in Galle did not know the HIV status of their last partner.

Table 213: Sexual history with casual partners, BB Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Had a casual sexual partner in the last 12 months</b>				
Yes	292/303	96.4	96.0	93.8 – 98.0
<b>Sex of casual partners</b> (among those who had causal partners in the last 12 months)				
Mostly male	12/291	4.1	3.8	1.7 – 5.8
Mostly female	251/291	86.3	87.5	84.0 – 91.5
The same – half men, half women	11/291	3.8	3.5	1.3 – 5.6
Don't know	17/291	5.8	5.1	2.9 – 7.1

<sup>120</sup> Given the large number of do not know (41.2%) regarding most common places where they meet casual partners, it is possible this question was not well understood

Table 213: Sexual history with casual partners, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Condom use during last 12 months</b>				
Every time	103/292	35.3	35.2	29.9 – 40.6
Almost every time	72/292	24.7	24.5	19.6 – 29.4
Sometimes	55/292	18.8	18.3	13.6 – 22.7
Never	20/292	6.8	6.8	3.9 – 9.7
Don't know	42/292	14.4	15.1	10.9 – 19.7
<b>Last casual partner's sex</b>				
Female	273/292	93.5	94.1	91.8 – 96.6
Male	18/292	6.2	5.8	3.3 – 8.1
Other	1/292	0.3	0.1	0 – 0.2
<b>Used a condom at last sex</b>				
Yes	187/268	69.8	67.1	60.2 – 72.8
<b>Person who suggested to use a condom</b>				
BB did	166/186	89.2	90.1	86.5 – 94.0
Partner did	20/186	10.8	9.9	6.0 – 13.5
<b>Reasons for using a condom</b> (multiple answers possible)				
To prevent HIV/STIs	153/186	82.3	81.7	76.1 – 87.3
Do not trust partner	61/186	32.8	33.4	26.0 – 41.2
Messages advising use of condoms	6/186	3.2	2.8	0.5 – 4.8
To prevent pregnancy	14/186	7.5	7.7	4.5 – 11.1
Don't know	7/186	3.8	3.5	1.1 – 5.7
Other	1/186	0.5	0.5	0 – 1.3
<b>Reasons for not using a condom</b> (multiple answers possible)				
Never heard of condoms	1/81	1.2	1.5	0 – 4.0
Don't know how to obtain condoms	1/81	1.2	1.1	0 – 2.7
Didn't think it was necessary	22/81	27.2	30.0	18.9 – 42.4
Didn't think of it	9/81	11.1	11.0	4.9 – 17.2
Not available	37/81	45.7	51.0	41.2 – 62.6
Too expensive	1/81	1.2	1.1	0 – 2.5
Partner objected	3/81	3.7	2.9	0 – 5.5
Don't like them	3/81	3.7	4.6	0.3 – 9.2
Used other contraceptive	0/81	-	-	-
Used other prevention method	1/81	1.2	0.7	0 – 1.6
Partner was faithful	4/81	4.9	4.0	0.6 – 7.0
Condoms take away pleasure	17/81	21.0	18.6	9.9 – 26.5
Don't know	3/81	3.7	3.1	0 – 6.2

Table 213: Sexual history with casual partners, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Places where last casual partner was met</b> (multiple answers possible)				
Brothel	1/283	0.4	0.2	0 – 0.5
Bar/Café/Disco/Restaurant/Nightclub	49/283	17.3	17.2	12.6 – 21.6
Hotel	43/283	15.2	13.2	9.3 – 16.4
Street, park, or public transport	18/283	6.4	5.9	3.5 – 8.1
Through friends	15/283	5.3	4.8	2.4 – 6.9
Internet, chat, or SMS	0/283	-	-	-
Motel or guest house	8/283	2.8	2.9	0.9 – 4.9
School	0/283	-	-	-
Party	6/283	2.1	1.9	0.5 – 3.1
Intermediary	2/283	0.7	0.6	0 – 1.4
Service station	5/283	1.8	1.9	0.4 – 3.5
Truck stop / three wheeler stop	0/283	-	-	-
Massage parlour/Spa	3/283	1.1	1.1	0 – 2.5
Other: Beach	19/283	6.7	6.0	3.2 – 8.5
Other: “Didn’t have male partners”	24/283	8.5	8.1	5.3 – 10.7
Other	11/283	3.9	3.7	1.6 – 5.7
Don’t know	105/283	37.1	41.2	35.6 – 48.2
<b>Last casual sexual partner’s HIV status</b>				
Negative	112/292	38.4	39.0	33.3 – 44.9
Positive	1/292	0.3	0.3	0 – 0.6
Don’t know	179/292	61.3	60.7	54.9 – 66.5

### 11.1.11 Sexual behaviour with regular partners

Nearly three quarters of BB in Galle had a regular partner in the last 12 months with the sex of this partner primarily female (83.5%) (Table 214). Condom use during the last 12 months varied, with just under a third reporting condom use every time. Most BB in Galle had women as their last regular partners (96.1%), with just under two thirds (61.2%) reporting condom use at last sex. The BB themselves typically suggest condom use (85.1%). Those who did not use condoms did so because their partner was faithful (30.5%), lack of availability (27.6%) and not thinking it necessary (25.9%) as the primary reasons. The most common places where last regular partners were met include bar/café/disco/restaurants/nightclub (23.8%) and hotels (23.3%).

Table 214: Sexual behaviour with regular partners, BB Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Had a regular sexual partner in the last 12 months</b>				
Yes	228/303	75.2	74.1	68.9 – 78.7



Table 214: Sexual behaviour with regular partners, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Sex of regular partners</b> (among those who had a regular partner in the last 12 months)				
Mostly male	9/224	4.0	4.0	1.2 – 6.8
Mostly female	185/224	82.6	83.5	79.1 – 89.2
The same – half men, half women	8/224	3.6	2.7	0.9 – 4.0
Don't know	22/224	9.8	9.5	5.5 – 13.3
<b>Condom use during last 12 months</b>				
Every time	72/228	31.6	31.5	24.8 – 38.1
Almost every time	42/228	18.4	17.2	11.7 – 22.2
Sometimes	51/228	22.4	21.5	16.0 – 26.6
Never	25/228	11.0	12.5	7.5 – 18.1
Don't know	38/228	16.7	17.3	11.9 – 23.1
<b>Last regular partner's sex</b>				
Female	218/228	95.6	96.1	94.0 – 98.5
Male	10/228	4.4	3.9	1.5 – 6.0
<b>Used a condom at last sex</b>				
Yes	130/206	63.1	61.2	53.2 – 68.3
<b>Person who suggested to use a condom</b>				
BB did	109/130	83.8	85.1	79.3 – 91.4
Partner did	19/130	14.6	12.7	7.1 – 17.5
Don't know	2/130	1.5	2.2	0 – 4.7
<b>Reasons for using a condom</b> (multiple answers possible)				
To prevent HIV/STIs	111/130	85.4	83.3	75.0 – 90.6
Do not trust partner	33/130	25.4	25.5	18.0 – 32.8
Messages advising use of condoms	4/130	3.1	3.8	0.6 – 7.4
To prevent pregnancy	10/130	7.7	7.8	3.8 – 11.7
Don't know	4/130	3.1	3.8	0.2 – 7.6
<b>Reasons for not using a condom</b> (multiple answers possible)				
Never heard of condoms	1/76	1.3	1.2	0 – 2.9
Don't know how to obtain condoms	1/76	1.3	0.6	0 – 1.3
Didn't think it was necessary	20/76	26.3	25.9	15.4 – 36.3
Didn't think of it	5/76	6.6	6.3	0.7 – 11.8
Not available	20/76	26.3	27.6	17.3 – 38.4
Too expensive	0/76	-	-	-
Partner objected	2/76	2.6	1.7	0 – 3.8
Don't like them	2/76	2.6	3.9	0 – 8.7
Used other contraceptive	0/76	-	-	-
Used other prevention method	0/76	-	-	-
Partner was faithful	22/76	28.9	30.5	19.3 – 42.5
Condoms take away pleasure	16/76	21.1	19.9	11.1 – 28.6
Don't know	2/76	2.6	2.3	0 – 5.0

Table 214: Sexual behaviour with regular partners, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Places where last regular partner was met</b> (multiple answers possible)				
Brothel	3/227	1.3	1.3	0 – 2.6
Bar/Café/Disco/Restaurant/Nightclub	55/227	24.2	23.8	17.7 – 29.8
Hotel	53/227	23.3	23.3	17.4 – 29.2
Street, park, or public transport	17/227	7.5	7.2	3.7 – 10.5
Through friends	18/227	7.9	8.0	4.2 – 11.7
Internet, chat, or SMS	1/227	0.4	0.4	0 – 1.1
Motel or guest house	10/227	4.4	4.1	1.6 – 6.4
School	0/227	-	-	-
Party	3/227	1.3	0.9	0 – 1.7
Intermediary	0/227	-	-	-
Service station	7/227	3.1	3.0	0.8 – 5.0
Truck stop / three wheeler stop	0/227	-	-	-
Massage parlour/Spa	3/227	1.3	1.1	0 – 2.3
Beach	29/227	12.8	14.1	8.7 – 19.8
Other	23/227	10.1	10.4	6.1 – 14.7
Don't know	24/227	10.6	10.2	6.2 – 14.1

### 11.1.12 Sexual behaviour with tourists

BB commonly interact with tourists through their work in tourism (e.g., as tour guides (29.9%), or in hotels (23.8%)). Additionally, close to half of them have sex with tourists, although most are not paid for it (Table 215). Frequency of sex with tourists varied, with over a third (44.5%) having sex with tourists 'sometimes', and less than twenty percent each having sex with tourists 'every time' (13.4%) and 'almost every time' (17.2%). Just over a quarter (25.6%) of BB in Galle received money the last time they had sex with a tourist, with the amount of money received ranging from 1,000 to 50,000 Rupees, split roughly in half with those receiving less than 5,000 rupees (47.5%) and 5,000 rupees or more (52.6%). Less than ten percent of BB in Galle received a non-financial incentive the last time they have sex with a tourist, of those over two thirds received an electronic item (e.g. phone, camera, ipod, laptop, etc.). Over two thirds of BB used a condom at last sex with a tourist (67.6%). Places where BB typically meet tourists include bars/clubs/restaurants (45.3%) and on the beach (41.0%). Clients are predominantly European (66.1%), followed by Asian (15.2%), and Sri Lankan (5.9%). BB in Galle predominantly have sex with female tourists (95.5%).

**Table 215: Sexual behaviour with tourists, BB Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Nature of interactions with tourists in and around coastal areas</b>				
(multiple answers possible)				
Tour guide	98/304	32.2	29.9	24.5 – 34.2
Driver	46/304	15.1	14.4	65.8 – 75.5
Hotel-related service	68/304	22.4	23.8	19.4 – 28.7
Other tourism-related service	34/304	11.2	12.3	8.5 – 16.9
I have sex with them (not for money)	108/304	35.5	34.5	29.5 – 39.1
They pay me for sex	34/304	11.2	9.9	6.8 – 12.5
Other	12/304	3.9	4.0	2.1 – 5.9
<b>Frequency of engaging in sex with tourists as a beach boy</b>				
Every time	41/305	13.4	13.4	9.8 – 17.0
Almost every time	57/305	18.7	17.2	13.2 – 20.7
Sometimes	142/305	46.6	44.5	38.9 – 49.3
Never	65/305	21.3	24.9	20.1 – 31.0
<b>Received money for sex at last sex with a tourist</b>				
Yes	62/240	25.8	25.6	20.7 – 30.3
<b>Amount of money received</b>				
Mean	6,916.7	-	6,288.5	-
Median	8,053.9	-	6,462.3	-
SD	5,000.0	-	5,000.0	-
Range	1,000 – 50,000	-	-	-
< 5000 Rupees	28/60	46.7	47.5	36.8 – 58.7
≥ 5000 Rupees	32/60	53.3	52.6	41.3 – 63.2
<b>Received something other than money at last sex with a tourist</b>				
Yes	24/238	10.1	8.2	5.0 – 10.7
Received electronic device (phone, camera, iPod, laptop)	17/24	70.8	70.8	54.7 – 86.8
<b>Amount of money usually received for sex</b>				
Range	0 – 50,000	-	-	-
0 Rupees	136/238	57.1	56.8	50.6 – 62.8
1,000 – 5,000	55/238	23.1	24.3	19.2 – 30.0
≥ 5,000	47/238	19.7	18.9	14.1 – 23.5
<b>Used a condom at last sex with a tourist</b>				
Yes	162/238	68.1	67.6	61.8 – 73.3

Table 215: Sexual behaviour with tourists, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Places where typically meets tourists</b>				
On the beach	125/306	40.8	41.0	35.3 – 46.8
Bars/Clubs/Restaurants	136/306	44.4	45.3	40.1 – 50.7
Hotel/Guest-house	33/306	10.8	10.5	7.3 – 13.5
Other <sup>121</sup>	10/306	3.3	2.8	1.2 – 4.2
Don't know	2/306	0.7	0.4	0 – 0.9
<b>Nationality of most tourists</b>				
Sri Lankan	18/306	5.9	5.9	3.5 – 8.4
Europe (including Russia) <sup>122</sup>	205/306	67.0	66.1	60.7 – 71.4
Asia	46/306	15.0	15.2	10.3 – 19.9
Other	14/306	4.6	4.7	22.6 – 7.2
Don't know	23/306	7.5	8.0	5.1 – 11.1
<b>Sex of a majority of tourists they have sex with</b>				
Female	230/240	95.8	95.5	92.7 – 98.2
Male	9/240	3.8	4.1	1.5 – 6.8
Other	1/240	0.4	0.4	0 – 1.0

### 11.1.13 Male condom availability and use

Almost all BB in Galle have heard of male condoms (99.6%), ever used a male condom (91.1%), and know where to find a male condom (99.7%) (Table 216). The most common places BB know where to find, and where they currently obtain, male condoms are private pharmacies/chemists (93.1% and 82.7%, respectively) and friends (12.9% and 11.7%, respectively). Nearly a third of BB in Galle usually carry condoms with them (32.5%), but few (15.1%) have been given condoms for free in the last 12 months by an NGO or health care centre. MSM in Galle generally find condoms to be affordable (89.6%) and easy to obtain (94.7%).

Table 216: Male condom availability, BB Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of a male condom</b>				
Yes	305/306	99.7	99.6	98.9 – 100
<b>Ever used a male condom</b>				
Yes	280/305	91.8	91.1	87.6 – 94.2
<b>Knows where to obtain male condoms</b>				
Yes	304/305	99.7	99.7	99.4 – 100

<sup>121</sup> Other: Hikkaduwa railway station (n=2), airport (n=1), surfing school (n=1), Galle fort (n=1), internet café (n=1), street (n=1), transport (n=1), rent-a-car (n=1), workplace (n=1).

<sup>122</sup> Other: Russia (n=95), Germany (n=59), England/UK (n=16), other nationalities present in smaller percentages

Table 216: Male condom availability, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Places where they can obtain male condoms</b> (multiple answers possible)				
Government STD clinic	5/304	1.6	1.4	0.3 – 2.3
Government non-STD clinic	3/304	1.0	0.7	0.05 – 1.3
Private clinic	5/304	1.6	1.4	0.3 – 2.4
Private pharmacy or chemist	280/304	92.1	93.1	90.9 – 95.8
Traditional healer/Herbalist	4/304	1.3	1.9	0.3 – 3.5
Neighbourhood market/Stand	10/304	3.3	3.1	1.4 – 4.8
Friends	36/304	11.8	12.9	9.1 – 17.2
Sex partner/s	8/304	2.6	2.9	1.2 – 4.6
Bar	1/304	0.3	0.4	0 – 0.9
Service Station/s	26/304	8.6	7.7	4.6 – 10.5
Don't know	2/304	0.7	0.5	0 – 0.9
<b>Main source/s of condoms</b> (multiple answers possible)				
Government STD clinic	12/305	3.9	3.1	1.5 – 4.4
Government non-STD clinic	1/305	0.3	0.3	0 – 0.8
Private clinic	3/305	1.0	0.8	0.04 – 1.6
Private pharmacy or chemist	251/305	82.3	82.7	78.7 – 86.9
Traditional healer/Herbalist	3/305	1.0	0.8	0.05 – 1.4
Neighbourhood market/Stand	9/305	3.0	2.8	1.2 – 4.3
Friends	33/305	10.8	11.7	7.8 – 15.9
Sex partner/s	5/305	1.6	1.8	0.5 – 3.1
Bar	0/305	-	-	-
Service Station/s	25/305	8.2	7.3	4.6 – 9.8
Don't know	23/305	7.5	8.3	4.9 – 12.0
<b>Usually carries condoms</b>				
Yes	101/305	33.1	32.5	27.0 – 37.8
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>				
Yes	50/305	16.4	15.1	10.9 – 18.7
<b>Condom is affordable</b>				
Very affordable	220/305	72.1	71.6	66.7 – 76.4
Somewhat affordable	56/305	18.4	18.0	13.8 – 22.2
Not affordable	1/305	0.3	0.2	0 – 0.3
Don't know	28/305	9.2	10.2	6.2 – 14.5
<b>Condom is easy to obtain</b>				
Very easy	227/305	74.4	75.2	70.7 – 80.0
Somewhat easy	61/305	20.0	19.5	14.9 – 23.9
Not easy	3/305	1.0	0.8	0 – 1.5
Don't know	14/305	4.6	4.5	2.2 – 6.7

### 11.1.14 Lubricant availability and use

Less than half (48.2%) of BB in Galle have ever used lubricant, of those who had water-based (24.1%) and silicon based (16.1%) were the most common types (Table 217). A third of those who have ever used lubricants, did not know the type. Less than half (41.3%) of BB in Galle would be interested in using lubricants in the future.

**Table 217: Lubricant availability and use, BB Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever heard of lubricant</b>				
Yes	152/304	50.0	48.2	41.9 – 53.8
<b>Lubricant use during vaginal or anal sex</b>				
Always	0/152	-	-	-
Usually	3/152	2.0	1.7	0 – 3.3
Sometimes	23/152	15.1	13.6	8.1 – 18.5
Rarely	20/152	13.2	13.4	7.2 – 19.6
Never	106/152	69.7	71.3	64.1 – 79.1
<b>Type of lubricant used</b> (multiple answers possible)				
Glycerin	1/46	2.2	1.6	0 – 37.8
Saliva/Water	2/46	4.3	3.5	0 – 6.9
Vaseline	2/46	4.3	3.1	0 – 6.4
Baby Oil	2/46	4.3	3.3	0 – 6.8
Lotion	7/46	15.2	12.6	4.0 – 20.5
Other Oil	3/46	6.5	10.4	1.1 – 21.1
Water-Based	13/46	28.3	24.1	12.8 – 33.5
Silicon-Based	8/46	17.4	16.1	6.3 – 25.2
Soap	0/46	-	-	-
What I get from peer educator	0/46	-	-	-
Don't know	12/46	26.1	32.2	20.1 – 45.8
<b>Interested in using lubricant in the future</b>				
Yes	21/46	45.7	41.3	26.3 – 55.0
No	9/46	19.6	19.3	7.7 – 31.0
Don't know	16/46	34.8	39.3	24.9 – 55.1

### 11.1.15 Knowledge of STI symptoms in women and men

Over three quarters (68.4%) of BB in Galle have heard of diseases that can be transmitted sexually, although only just over half (50.3%) know that it is possible to have any STI without symptoms (Table 218). The most commonly mentioned symptoms of STIs in women and men include itching (30.1% and 30.3%, respectively), genital discharge (23.0% and 29.1%) and genital ulcers/sores (17.2% and 24.1%). Among BB in Galle who have heard of STIs, almost half could not mention any symptoms of STIs in women (46.7%) or men (41.2%). The most commonly mentioned places where someone can obtain treatment for an STI include a Government clinic of hospital (48.7%) and Government STD clinic (22.0%), although nearly a third (28.5%) of BB in Galle do not know any place where STI treatment can be obtained.

**Table 218: Knowledge of STI symptoms in women and men, BB Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Heard of diseases that can be transmitted sexually</b>				
Yes	212/306	69.3	68.4	62.9 – 73.7
<b>Knows it is possible to have an STI without symptoms</b>				
Yes	154/306	50.3	50.3	44.8 – 55.7
<b>Mentioned as a sign/symptom of STIs in women</b> (multiple answers possible)				
Abdominal pain	12/212	5.7	4.4	1.9 – 6.4
Genital discharge	53/212	25.0	23.0	1.7 – 28.2
Foul smelling discharge	17/212	8.0	6.3	2.8 – 9.2
Burning pain on urination	18/212	8.5	6.9	3.8 – 9.4
Genital ulcers or sores	36/212	17.0	17.2	12.0 – 22.5
Swelling in groin area	24/212	11.3	10.9	6.4 – 15.3
Itching	71/212	33.5	30.1	23.8 – 34.8
Other (fever, cough)	1/212	0.5	0.5	0.04 – 0.9
<b>Does not know any symptoms of STIs in women</b> (among those who have heard of STIs)				
Yes	90/212	42.5	46.7	40.1 – 54.7
<b>Mentioned as a sign/symptom of STIs in men</b> (multiple answers possible)				
Abdominal pain	11/212	5.2	3.9	1.6 – 5.8
Genital discharge	66/212	31.1	29.1	22.6 – 34.8
Foul smelling discharge	13/212	6.1	4.8	2.4 – 6.7
Burning pain on urination	13/212	6.1	5.3	2.7 – 7.6
Genital ulcers or sores	50/212	23.6	24.1	18.0 – 30.4
Swelling in groin area	33/212	15.6	15.0	9.9 – 20.0
Itching	68/212	32.1	30.3	23.8 – 36.1
<b>Does not know any symptoms of STIs in men</b>				
Yes	81/212	38.2	41.2	35.4 – 49.6
<b>Places where someone from the community who has an STI can get treatment</b> (multiple answers possible)				
Ayurvedic physician	1/306	0.3	0.4	0 – 1.0
Pharmacy	24/306	7.8	7.8	4.7 – 10.8
Private clinic	75/306	24.5	22.0	17.5 – 25.5
Government STD clinic	139/306	45.4	48.7	44.0 – 55.0
Government clinic or hospital (non-STD)	91/306	29.7	28.5	23.9 – 32.8
Don't know				

### 11.1.16 Patterns of STI care seeking

Very few BB in Galle had discharge in the last 12 months (2.0%), an ulcer sore (4.1%), or had a doctor confirm the presence of an STI (2.7%) (Table 219). Nearly all respondents who did have discharge or an ulcer/sore sought treatment (74.2% and 100.0%, respectively). STI treatment was sought at private clinics (52.7%) or private pharmacies or chemists (46.1%), and the reason for choosing these venues included recommendation from a friend (58.7%) and quality and/or specialized care (15.6%) at given location. More than three quarters (85.8%) of BB in Galle were satisfied with the quality of care they received.

**Table 219: Patterns of STI care seeking, BB Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Doctor confirmed STI in the last 12 months</b>				
Yes	7/212	3.3	2.7	0.9 – 4.3
<b>STI symptoms (discharge) in the last 12 months</b>				
Yes	7/306	2.3	2.0	0.6 – 3.2
<b>Sought treatment for discharge</b>				
Yes	5/7	71.4	74.2	44.9 - 100
<b>Reasons for not seeking treatment for discharge</b> (multiple answers possible)				
Didn't know where to go	0/2	-	-	-
Embarrassed or afraid	0/2	-	-	-
Could not afford treatment	0/2	-	-	-
Unable to get transportation	0/2	-	-	-
Didn't think I needed it	2/2	100	100	-
<b>STI symptoms (sore or ulcer) in the last 12 months</b>				
Yes	12/306	3.9	4.1	2.1 – 6.3
<b>Sought treatment for sore or ulcer</b>				
Yes	12/12	100	100	-
<b>Places where STI treatment (for discharge, sore, or ulcer) was sought</b> (multiple answers possible)				
Government STD clinic	1/17	5.9	4.3	0 – 11.0
Government non-STD clinic	0/17	-	-	-
Private pharmacy or chemist	9/17	52.9	52.7	32.9 – 72.9
Private clinic	8/17	47.1	46.1	22.5 – 69.6
Traditional healer/Herbalist	0/17	-	-	-
Medicine or herbs from home	0/17	-	-	-



Table 219: Patterns of STI care seeking, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for choosing this/these places</b> (multiple answers possible)				
Confidentiality	3/17	17.6	13.3	0.8 – 24.3
Affordability	0/17	-	-	-
Recommendation by friend or acquaintance	10/17	58.8	58.7	36.4 – 81.1
Quality and/or specialized care given at this place	2/17	11.8	15.6	0 – 33.6
Knows the caregivers	1/17	5.9	7.8	0 – 20.4
Known friendliness of the caregivers	0/17	-	-	-
Proximity/Location	2/17	11.8	8.8	0 – 18.7
Don't know	1/17	5.9	6.4	0 – 16.8
<b>Satisfaction with treatment from health care provider during last visit for STI treatment</b>				
Very satisfied	14/19	70.0	75.7	59.4 – 92.8
Somewhat satisfied	2/19	10.0	10.1	0 – 22.0
Not satisfied	3/19	15.0	14.2	0.5 – 27.1

### 11.1.17 HIV information and personal risk perception

Just over two thirds (69.6%) of BB in Galle have heard of HIV and AIDS, with the primary source of information stemming from school (21.7%), followed by television (14.2%), and friends/family (13.8%) (Table 220). More than two thirds (69.3%) have never discussed HIV/AIDS with any sexual partner, although among those who did, over three quarters (84.0%) have had some or all of their partners disclose their HIV status to them. Among those who have heard of HIV/AIDS, less than a quarter (15.1%) of know someone who is HIV positive or who has died of AIDS. Most BB believe they are at a small risk of contracting HIV (46.0%), due to many sexual partners (45.0%) and not always using condoms (34.9%). Those who believe they are not at risk (38.1%) cite always using condoms as the reason (63.9%), followed by trusting their partner(s) (32.4%). Of the n=2 BB who believed their risk perception to be high, n=1 used a condom at last sex (data not shown).

**Table 220: HIV information and personal risk perception, BB Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Main source of the most thorough information about HIV/AIDS</b>				
School	44/211	20.9	21.7	16.2 – 27.5
Health services	18/211	8.5	10.5	5.9 – 17.5
Workplace	5/211	2.4	2.7	0.4 – 5.2
Friends/Family	27/211	12.8	13.8	8.7 – 19.5
Television	30/211	14.2	14.2	9.6 – 18.7
Newspaper/Magazines	29/211	13.7	12.4	7.6 – 16.6
Posters/Billboards	10/211	4.7	3.9	1.5 – 5.8
Pamphlets/Leaflets	12/211	5.7	4.8	1.9 – 7.4
Radio	0/211	-	-	-
NGOs	32/211	15.2	13.4	8.5 – 17.5
Other <sup>123</sup>	4/211	1.9	2.7	0.6 – 5.1
<b>Discussed HIV/AIDS with any sexual partner</b>				
Yes, all	8/211	3.8	3.3	1.1 – 5.4
Yes, some	58/211	27.5	25.2	19.4 – 30.2
No, none	141/211	66.8	69.3	63.7 – 75.6
Don't know	4/211	1.9	2.3	0.2 – 4.5
<b>Sexual partner/s told them their HIV status</b>				
Yes, all	7/66	10.6	10.5	3.7 – 17.2
Yes, some	48/66	72.7	73.5	64.1 – 83.2
No, none	11/66	16.7	16.0	7.3 – 24.6
<b>Knows somebody who is HIV-positive or has died of AIDS</b>				
Yes	35/211	16.6	15.1	10.1 – 19.5
<b>Close friend or relative died of HIV/AIDS</b>				
Yes, close friend	0/211	-	-	-
Yes, close relative	5/211	2.4	1.8	0 – 3.4
<b>Perception of personal HIV risk</b>				
No risk	121/306	39.5	38.1	32.8 – 42.9
Small risk	131/306	42.8	46.0	41.2 – 52.0
Moderate risk	17/306	5.6	4.6	2.7 – 6.3
High risk	2/306	0.7	0.6	0 – 1.4
Don't know	35/306	11.4	10.6	7.2 – 13.6

<sup>123</sup> Prison (n=1), tourist board (n=1), internet (n=1), hotel school (n=1)

Table 220: HIV information and personal risk perception, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Reasons for believing they are at risk of contracting HIV</b> (among those who said they were at risk)				
Many sexual partners	67/150	44.7	45.0	36.2 – 53.8
Didn't always use condoms	53/150	35.3	34.9	26.3 – 43.2
Injected drugs	0/150	-	-	-
Partner has other partners	19/150	12.7	13.4	8.3 – 18.7
Other <sup>124</sup>	8/150	5.3	5.2	1.9 – 8.5
Don't know	3/150	2.0	1.6	0 – 3.2
<b>Reasons for believing they are not at risk of contracting HIV</b> (among those who said they were not at risk) (multiple answers possible)				
Trust my partner/s	38/121	31.4	32.4	24.2 – 40.9
Always use condoms	79/121	65.3	63.9	54.4 – 72.7
Don't know	6/121	5.0	6.8	1.3 – 13.0
Other <sup>125</sup>	9/121	7.4	6.5	2.3-10.4

### 11.1.18 Knowledge of HIV and AIDS

Knowledge of HIV and AIDS amongst BB in Galle varies, ranging from just over half of BB responding correctly (56.0%) that HIV cannot be transmitted from mosquito bites, to more than three quarters (80.2%) answering correctly that HIV transmission can be reduced by only having sex with one uninfected partner (Table 221). Less than a quarter (20.1%) of BB in Galle both correctly identified and rejected major misconceptions about HIV transmission. Nearly two thirds of BB in Galle (61.3%) know that HIV can be transmitted from a mother to her unborn child; however only just over a third (26.2%) have heard of ART.

Table 221: Knowledge of HIV and AIDS, BB Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners</b>				
Yes	243/306	79.4	80.2	76.1 – 84.4
<b>Person can reduce the risk of getting HIV by using a condom every time he/she has sex</b>				
Yes	242/306	79.1	79.5	75.2 – 83.9
<b>Healthy-looking person can have HIV</b>				
Yes	213/306	69.6	68.5	63.2 – 73.3

<sup>124</sup> Other: Sex with foreigners (n=5), sex with men (n=1), unsafe sex (n=1), can't trust my partner (n=1)

<sup>125</sup> Other: No symptoms (n=5), not at risk (n=1), tested (n=1), oral sex (n=1), poor knowledge (n=1)

Table 221: Knowledge of HIV and AIDS, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Person can get HIV from mosquito bites</b>				
No	178/306	58.2	56.0	50.4 – 60.7
<b>Person can get HIV by sharing food with someone who is infected</b>				
No	184/306	60.1	62.3	57.5 – 67.9
<b>Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission</b>				
Yes	68/306	22.2	20.1	16.0 – 23.4
<b>GARPR Knowledge Composite Indicator without GARPR (mosquito question)</b>				
Yes	96/306	31.4	31.4	26.5 – 36.4
<b>HIV can be transmitted from mother to her unborn child</b>				
Yes	191/306	62.4	61.3	55.4 – 66.0
No	40/306	13.1	12.6	9.0 – 16.0
Don't know	75/306	24.5	26.4	22.1 – 31.6
<b>Ever heard of ART</b>				
Yes	81/306	26.5	26.2	21.7 – 30.7

### 11.1.19 Stigma related to HIV and AIDS

Stigma amongst BB in Galle is present, but varies. For example, while more than three quarters (84.4%) of BB would be willing to care for an HIV positive family member, only just over half (58.2%) agree that an HIV positive student should be allowed to continue attending school, even fewer would buy food from an HIV positive food seller (37.2%), and more than three quarters would keep it a secret if a family member were HIV positive (82.1%) (Table 222).

Table 222: Stigma related to HIV and AIDS

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Agrees to take care of an HIV positive family member at home</b>				
No	258/306	84.3	84.4	80.3 – 88.6
<b>Agrees that an HIV positive student should be allowed to continue attending a school</b>				
Yes	182/306	59.5	58.2	52.3 – 63.6
<b>Agrees to buy food from an HIV positive food seller</b>				
Yes	119/306	38.9	37.2	31.4 – 42.4
<b>Thinks that, if a family member becomes HIV positive, his/her HIV status should remain confidential</b>				
Yes	246/306	80.4	82.1	78.6 – 86.3

### 11.1.20 HIV testing

Few BB in Galle know where to go for a confidential HIV test (37.3%), have ever been tested (10.4%), and have had a test in the last 12 months and received a result (4.3%) (Table 223). The primary reason for their last HIV test is simply wanting to know their status (88.7%), followed by foreign employer requesting the test (8.6%).<sup>126</sup> While four respondents (1.3%) perceived their current HIV status to be positive, none actually tested positive. Nearly all BB in Galle were satisfied with the quality of services they received during their last HIV test (very satisfied: 26.6%, satisfied: 69.1%).

**Table 223: HIV testing, BB Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Knows where HIV testing can be obtained</b>				
Yes	116/306	37.9	37.3	31.9 – 42.5
<b>Ever tested for HIV</b>				
Yes	28/306	9.2	10.4	6.7 – 14.5
<b>The test was voluntary</b>				
Yes	28/28	100	100	-
<b>Site where last testing for HIV took place</b>				
Government STD Clinic	21/28	75.0	78.5	65.2 – 93.2
Government non-STD Clinic	5/28	17.9	19.8	4.6 – 36.4
Private Clinic / Private Pharmacy or Chemist	2/28	7.1	6.7	0 – 16.0
Other <sup>127</sup>	0/28	-	-	-
<b>Reasons for never getting an HIV test</b> (multiple answers possible)				
Don't know where to go	127/278	45.7	44.5	38.9 – 49.8
Always use condoms	13/278	4.7	4.1	2.0 – 5.9
Not at risk of getting HIV	89/278	32.0	33.5	28.7 – 39.0
Didn't have time/Too busy	72/278	25.9	27.5	22.7 – 32.9
I trust my partner	5/278	1.8	1.9	0.6 – 3.4
Afraid of knowing I may be HIV positive	5/278	1.8	2.0	0.4 – 3.8
Lack of confidentiality	3/278	1.1	1.7	0 – 3.8
Inconvenient testing location	15/278	5.4	4.6	2.4 – 6.4
No money	0/278	-	-	-
Don't know	15/278	5.4	5.9	3.1 – 8.8
Other <sup>128</sup>	4/278	1.4	1.6	0.0-3.6

<sup>126</sup> Sample proportion used as sample size small (n=4).

<sup>127</sup> Other: Participated in a study

<sup>128</sup> Other: Didn't think about (n=1), didn't want to check it (n=1), poor awareness (n=1), poor knowledge (n=1)

Table 223: HIV testing, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Time since last HIV test</b>				
≤ 1 year	12/27	44.4	44.1	22.7 – 65.2
> 1 year	12/27	44.4	38.7	19.4 – 56.4
Don't know	3/27	11.1	17.2	1.5 – 34.7
<b>Knows result of last HIV test</b>				
Yes	25/28	89.3	92.0	84.0 – 100
<b>Tested for HIV in the past 12 months and knows result</b>				
Yes (among those who tested)	11/24	45.8	51.8	31.0 – 74.2
Yes (among all)	11/306	3.6	4.3	1.5 – 7.4
<b>Reasons for the last HIV test</b> (multiple answers possible)				
Wanted to know my HIV status	26/28	92.9	88.7	74.1 – 100
My partner asked me to get tested	1/28	3.6	5.6	0 – 15.2
Wanted to start sexual relations with a new partner	0/28	-	-	-
Wanted to get married	0/28	-	-	-
Need for loan/insurance coverage	0/28	-	-	-
Employer requested the test	1/28	3.6	8.6	0 – 21.5
Felt sick	0/28	-	-	-
Advised by health worker	1/28	3.6	3.0	0 – 7.6
Advised by peer educator	0/28	-	-	-
Don't know	1/28	3.6	1.3	0 – 2.2
<b>Result of last HIV test</b>				
HIV-negative	23/28	82.1	75.2	50.1 – 98.0
HIV-positive	0/28	-	-	-
Indeterminate	0/28	-	-	-
Did not get the result	5/28	17.9	24.8	2.0 – 49.9
<b>Reason for not getting last HIV test result</b>				
Didn't have time/Too busy	0/5	-	-	-
Not infected	0/5	-	-	-
Too scared	0/5	-	-	-
Testing centre didn't have result	5/5	100	100	-
<b>Perception of current HIV status</b>				
HIV-negative	217/306	70.9	72.0	67.0 – 77.4
HIV-positive	4/306	1.3	1.1	0.1 – 2.0
Don't know	85/306	27.8	26.9	21.6 – 31.9
<b>Satisfaction with quality of services provided during last HIV testing</b>				
Very satisfied	10/28	35.7	26.6	7.7 – 43.1
Satisfied	16/28	57.1	69.1	51.9 – 89.7
A little satisfied	2/28	7.1	4.3	0 – 9.2
Not satisfied	0/28	-	-	-

### 11.1.21 Experience of stigma, discrimination and violence

Very few BB in Galle have experienced stigma, discrimination, or violence in the last 12 months, including being refused health care (0.9%), police assistance (0.4%), being verbally insulted (8.7%), being hit, kicked, or beaten (0.5%) or sexually assaulted (1.5%) (Table 224). Of the five respondents who have experienced sexual assault, they were assaulted by a female tourist (n=2), social acquaintance (n=2) or an unknown person (n=1).

**Table 224: Experience of stigma, discrimination and violence**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Has been refused health care because someone because you are a beach boy / have sex with tourists</b>				
Yes	4/306	1.3	0.9	0.2 – 1.4
<b>Has been refused police assistance because you are a beach boy / have sex with tourists</b>				
Yes	1/306	0.3	0.4	0 – 0.9
<b>Has been verbally insulted because you are a beach boy / have sex with tourists</b>				
Yes	23/306	7.5	8.7	5.1 – 12.7
<b>Has been hit, kicked, or beaten because you are a beach boy / have sex with tourists</b>				
Yes	2/306	0.7	0.5	0 – 0.9
<b>Has been sexually assaulted or raped</b>				
Yes	5/306	1.6	1.5	0.5 – 2.3
<b>Type of abuser last time they were sexually assaulted or raped</b>				
Unknown person	1/5	20.0	20.8	0 – 52.6
Social acquaintance	2/5	40.0	40.3	1.1 – 72.6
Family member/Relative	0/5	-	-	-
Police	0/5	-	-	-
Client	0/5	-	-	-
Paying partner	0/5	-	-	-
Non-paying partner or boyfriend	0/5	-	-	-
Other (female tourist)	2/5	40.0	38.9	3.0 – 76.8
<b>Sought medical treatment after sexual assault/rape</b>				
Yes	5/5	100	100	-
<b>Reported sexual assault/rape to the police</b>				
Yes	5/5	100	100	-

### 11.1.22 Health care utilization

Just under half of BB in Galle sought medical care in the previous 12 months, but none experienced difficulty in doing so (Table 225).

**Table 225: Health care utilization, BB Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Sought medical care for any reason during last 12 months</b>				
No	139/306	45.4	46.6	41.5 – 52.1
<b>Had difficulty getting medical care during last 12 months</b>				
Yes	0/139	-	-	-

### 11.1.23 Programme coverage

Few BB in Galle have been in contact with a peer educator (3.5%), of those who had they were in contact with them between one (13.4%) to three or more times (33.4%) (Table 226). Peer educators provided general STI and HIV information (89.7%), condoms (39.0%) and referral for STI treatment (10.5%). Less than ten percent (7.8%) of BB meet the requirements for the GARPR indicator for having been reached by prevention programmes (received free condom and know where to go for an HIV test).

**Table 226: Programme coverage, BB Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Contact with a health peer educator in the community in the last 6 months</b>				
Yes	12/306	3.9	3.5	1.8 – 5.0
<b>Number of times of contact with a health peer educator in the last 6 months</b>				
1	2/12	16.7	13.4	0 – 28.7
2	4/12	33.3	30.7	7.3 – 53.1
≥ 3	3/12	25.0	33.4	7.3 – 63.4
Don't know	3/12	25.0	22.6	0 – 44.1
<b>Services or information received from the health peer educator</b>				
General HIV/STI prevention/transmission information	11/12	91.7	89.7	70.8 – 100
Condoms	5/12	41.7	39.0	12.4 – 63.8
Referral for STI treatment	1/12	8.3	10.5	0 – 28.9
Referral for VCT	0/12	-	-	-
Medical visit	1/12	8.3	8.9	0 – 23.8
<b>Reached with HIV prevention programs</b> (received free condoms in the last 12 months and know where HIV testing can be obtained)				
Yes	28/306	9.2	7.8	5.0 – 10.0



### 11.1.24 Alcohol and drug use

Although most BB have consumed alcohol in their lives, most have not had a drink in the last four weeks (42.2%), although over half (57.6%) drink every day, less than once a week or once a week (Table 227). A small number (3.6%) of BB in Galle have injected drugs in the last 12 months, mostly once a month or less (67.7%), and usually heroin (53.3%). Of those who have injected drugs, over a third (36.7%) shared needles or syringes. Other drug usage was also present, although minimally, with ten percent or less of BB in Galle using ecstasy (3.1%), opium (2.2%), hashish (7.3%) and heroin (10.7%) in the last six months. The most commonly used drug is cannabis, with over a third (34.0%) of BB using it in the last six months.

**Table 227: Alcohol and drug use, BB Galle**

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Ever consumed alcohol</b>				
Yes	277/306	90.5	90.2	86.8 – 93.3
<b>Alcohol consumption in the last 4 weeks</b>				
Never drink alcohol	1/276	0.4	0.2	0 – 0.5
Never in the last 4 weeks	109/276	39.5	42.2	36.5 – 49.1
Once a week	82/276	29.7	28.9	23.3 – 34.1
Less than once a week	20/276	7.2	6.2	3.8 – 8.2
Every day	64/276	23.2	22.5	17.6 – 27.0
<b>Injected drugs in the last 12 months</b>				
Yes	11/306	3.6	3.6	1.6 – 5.8
<b>Frequency of injecting drugs in the last 12 months</b>				
Once a month or less	8/11	72.7	67.7	39.5 – 95.3
2-4 times a month	2/11	18.2	16.3	0 – 34.1
2-3 times a week	1/11	9.1	16.1	0 – 42.2
≥ 4 times a week	0/11	-	-	-
<b>Type of drug injected most often</b>				
Heroin	6/10	60.0	53.3	18.9 – 82.9
Meth	0/10	-	-	-
Speedball (heroin + cocaine)	3/10	30.0	22.6	0 – 43.3
Don't know	1/10	10.0	23.6	0 – 63.9
<b>Shared needles/syringes</b>				
Yes	4/10	40.0	36.7	6.3 – 67.9
<b>Heroin</b>				
Didn't use it in the last 6 months	9/302	3.0	3.4	1.4 – 5.6
Once a month or less	5/302	1.7	1.8	0.3 – 3.2
Several times a month	8/302	2.6	2.6	0.1 – 3.8
2-4 times a month	7/302	2.3	2.2	0.6 – 3.8
2-3 times a week	8/302	2.6	2.6	0.8 – 4.3
≥ 4 times a week	4/302	1.3	1.5	0.1 – 2.9
Have never used	260/302	86.1	85.8	81.8 – 89.7
Don't know	1/302	0.3	0.1	0 – 2.3

Table 227: Alcohol and drug use, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Cannabis</b>				
Didn't use it in the last 6 months	7/302	2.3	2.5	0.9 – 4.2
Once a month or less	11/302	3.6	5.4	1.9 – 9.2
Several times a month	7/302	2.3	1.9	0.4 – 3.2
2-4 times a month	14/302	4.6	5.8	2.8 – 9.3
2-3 times a week	23/302	7.6	6.8	4.1 – 9.3
≥ 4 times a week	43/302	14.2	14.2	9.5 – 18.8
Have never used	197/302	65.2	63.4	56.3 – 69.9
<b>Cocaine</b>				
Didn't use it in the last 6 months	6/301	2.0	2.0	0.6 – 3.4
Once a month or less	7/301	2.3	2.3	0.7 – 3.8
Several times a month	8/301	2.7	2.4	1.0 – 3.7
2-4 times a month	4/301	1.3	1.3	0.02 – 2.6
2-3 times a week	3/301	1.0	1.1	0 – 2.3
≥ 4 times a week	2/301	0.7	0.8	0.2 – 1.5
Have never used	271/301	90.0	90.1	87.1 – 93.1
<b>Ecstasy</b>				
Didn't use it in the last 6 months	3/300	1.0	0.9	0 – 1.6
Once a month or less	2/300	0.7	0.8	0 – 1.7
Several times a month	1/300	0.3	0.3	0 – 0.7
2-4 times a month	2/300	0.7	1.0	0 – 2.5
2-3 times a week	2/300	0.7	0.6	0.02 – 2.5
≥ 4 times a week	1/300	0.3	0.4	0 – 0.9
Have never used	289/300	96.3	96.0	94.0 – 98.0
<b>Amphetamines</b>				
Didn't use it in the last 6 months	3/297	1.0	0.9	0 – 1.7
Once a month or less	2/297	0.7	0.6	0 – 1.4
Several times a month	0/297	-	-	-
2-4 times a month	0/297	-	-	-
2-3 times a week	1/297	0.3	0.3	0 – 0.6
≥ 4 times a week	0/297	-	-	-
Have never used	290/297	97.6	97.9	96.7 – 99.2
Don't know	1/297	0.3	0.3	0 – 0.9
<b>Opium</b>				
Didn't use it in the last 6 months	3/299	1.0	0.8	0.02 – 1.6
Once a month or less	1/299	0.3	0.3	0 – 0.7
Several times a month	0/299	-	-	-
2-4 times a month	4/299	1.3	1.6	0.2 – 3.1
2-3 times a week	1/299	0.3	0.3	0 – 0.7
≥ 4 times a week	0/299	-	-	-
Have never used	290/299	97.0	97.0	95.3 – 98.7

Table 227: Alcohol and drug use, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Hashish</b>				
Didn't use it in the last 6 months	4/302	1.3	1.2	0.2 – 2.1
Once a month or less	2/302	0.7	0.6	0 – 1.3
Several times a month	5/302	1.7	1.3	0.3 – 2.2
2-4 times a month	2/302	0.7	0.6	0 – 1.1
2-3 times a week	6/302	2.0	2.0	0.6 – 3.4
≥ 4 times a week	8/302	2.6	2.9	1.1 – 4.8
Have never used	275/302	91.1	91.4	88.7 – 94.3
<b>Other</b>				
Used in the last 6 months	115/300	38.3	40.0	35.1 – 45.6
Didn't use it in the last 6 months	0/302	-	-	-
Once a month or less	11/302	3.6	4.0	2.0 – 6.1
Several times a month	9/302	3.0	2.5	1.0 – 3.8
2-4 times a month	5/302	1.7	1.9	0.4 – 3.5
2-3 times a week	11/302	3.6	4.1	1.8 – 6.7
≥ 4 times a week	79/302	26.2	27.4	22.7 – 32.7
Have never used	185/302	61.3	59.5	53.9 – 64.5
Don't know	2/302	0.7	0.5	0 – 1.1

### 11.1.25 Media usage

TV is the most commonly used media outlet amongst BB in Galle, with over three quarters (82.7%) watching TV at least once a week (includes all those who responded at least once a week, most days and every day) (Table 228). Radio, internet and newspaper are also consumed at least once a week, at 68.9%, 63.2% and 50.0%. Most (93.7%) BB do not use the internet to find sexual partners. Most BB have a mobile phone (94.9%), use it to communicate with other BB (79.6%), would be interested in receiving health related text messages (78.7%) and attending learning activities (89.9%).

Table 228: Media usage, BB Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Radio</b>				
Never	92/306	30.1	29.0	24.4 – 33.1
Once a month	7/306	2.3	2.1	0.6 – 3.4
Once a week	14/306	4.6	4.0	2.1 – 5.6
Most days	124/306	40.5	43.3	38.3 – 49.5
Every day	69/306	22.5	21.6	17.0 – 25.8
<b>TV</b>				
Never	49/306	16.0	16.1	11.5 – 20.5
Once a month	5/306	1.6	1.2	0.3 – 1.9
Once a week	11/306	3.6	3.1	1.3 – 4.8
Most days	137/306	44.8	46.6	41.1 – 52.9
Every day	104/306	34.0	33.0	28.0 – 37.7

Table 228: Media usage, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Newspaper</b>				
Never	141/306	46.1	46.9	41.2 – 53.0
Once a month	12/306	3.9	3.1	1.3 – 4.6
Once a week	63/306	20.6	19.4	15.0 – 23.5
Most days	58/306	19.0	20.4	15.8 – 25.4
Every day	32/306	10.5	10.2	6.7 – 13.6
<b>Internet</b>				
Never	113/306	36.9	36.6	31.2 – 41.7
Once a month	1/306	0.3	0.3	0 – 0.6
Once a week	21/306	6.9	7.9	4.7 – 11.4
Most days	90/306	29.4	31.4	26.2 – 37.5
Every day	81/306	26.5	23.9	18.6 – 28.1
<b>Frequency of using the Internet to find sexual partners</b>				
Never	288/306	94.1	93.7	90.9 – 96.4
Once a month	2/306	0.7	0.8	0 – 1.7
Once a week	5/306	1.6	1.6	0.3 – 2.8
Most days	10/306	3.3	3.7	1.6 – 6.1
Every day	1/306	0.3	0.2	0 – 0.5
<b>Has a mobile phone</b>				
Yes	290/306	94.8	94.9	92.8 – 97.1
<b>Uses mobile phone to communicate with other BB</b>				
Yes	230/290	79.3	79.6	75.0 – 84.3
<b>Interested in receiving HIV and health-related text messages</b>				
Yes	232/290	80.0	78.7	73.6 – 83.3
<b>Interested in attending learning activities</b>				
Yes	276/306	90.2	89.9	86.4 – 93.2

### 11.1.26 Network size and multiplier questions

BB in Galle estimate the average number of BB living in Galle to be 1,214, of whom 1,091 are above the age of 18 (Table 229). Less than ten percent (7.2%) have been enrolled in a Global Fund outreach programme for BB.

Table 229: Network and multiplier questions, BB Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Estimation of the number of BB who live in Galle</b>	258/306	-	-	-
Mean	1,241.0	-	1,213.5	-
SD	687.6	-	677.6	-
Median	1,200.0	-	1,000.0	-
Range	150 – 5,000	-	-	-

Table 229: Network and multiplier questions, BB Galle (Continued)

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>Estimation of the number of BB older than 18 who live in Galle</b>	248/306	-	-	-
Mean	1,119.4	-	1,090.9	-
SD	565.1	-	559.4	-
Median	1,000.0	-	970.0	-
Range	200 – 4,500	-	-	-
<b>*Number of BB older than 18 seen in the last month</b>				
Mean	7.09	-	5.94	-
SD	3.83	-	3.07	-
Median	6.0	-	6.0	-
Range	1 – 20	-	-	-
<b>Enrolled by an NGO in the Global Fund outreach programme for beach boys</b>				
Yes	26/306	8.5	7.2	4.7 – 9.3
<b>Name of the NGO they were enrolled by in 2014<sup>129</sup></b>				
Samadhi	6/306	2.0	1.8	0.6 – 3.0

### 11.2 BB summary analysis of key variables

A summary of key variables for BB is presented in Table 230.

Table 230: Summary analysis of key variables, BB in Galle

Characteristic	Sample proportions		Population estimates	
	n/N	%	%	95% CI
<b>HIV</b>	0/306	-	-	-
<b>Syphilis</b>	0/306	-	-	-
<b>Composite knowledge</b>	68/306	22.2	20.1	16.0 – 23.4
<b>Used a condom with last sex sexual partner</b>	187/268	69.8	67.6	61.8 – 73.3
<b>Tested for HIV in the past 12 months and knows result</b>	11/306	3.6	4.3	1.5-7.4
<b>Received free condoms from NGOs or a health care center in the last 12 months</b>	50/305	16.4	15.1	10.9 – 18.7
<b>Reached with HIV prevention programs</b>	28/306	9.2	7.8	5.0 – 10.0
(received free condoms and know where HIV testing can be obtained)				

<sup>129</sup> Among 26 participants who said they were enrolled by an NGO in the GF outreach program for Beach Boys, 19 (73.1%) also provided the name of the NGO and date of enrollment. Among them, 13 (68.4%) were enrolled before 2014. All remaining 6 participants were in 2014 enrolled in the GF program for Beach Boys by Samadhi.

### 11.3 BB multivariate analysis

Using a logistic regression analysis, comparison of factors associated with outcomes was undertaken: using a condom at last sex, having an HIV test in the past 12 months and knowing the results, and reached with prevention programs. The variables used as correlates are presented in the tables. Individualized RDS weights for bivariate (unadjusted OR) and multivariate (adjusted OR) were exported from RDS-Analyst using a Gile's SS estimator. Proportions (n/N) and percentage (%) among groups is shown without RDS weights. Cases with missing values were excluded from the analysis.

Amongst BB in Galle, the outcome of having an HIV test and obtaining result is too rare (n=11) to conduct a multivariate analysis. Only bivariate analysis is shown. Additionally, age and number of sexual partners were dichotomized for the bivariate analysis. For bivariate analysis, contact with a peer educator (OR 19.97), receiving free condoms in last 12 months (OR 9.83), and three or more sexual partners in the last six months (OR 4.67), are associated with having had an HIV test and received the results.

**Table 231: Factors associates with having an HIV test in the past 12 months and knowing the result, BB in Galle**

	HIV test in the past 12 months		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	11/306	3.6	-	-
<b>Age</b>				
<25	3/161	1.9	1.0	-
≥ 25	8/145	5.5	3.60*** (1.78 – 7.27)	-
<b>Level of education</b>				
≤ Grade 10	3/99	3.0	1.0	-
≥ Passed O/L	8/207	3.9	0.44** (0.24 – 0.81)	-
<b>Monthly income</b>				
≤20.000	1/74	1.4	1.0	-
>20.000	6/193	3.1	3.68* (1.17 – 11.6)	-
<b>Number of all sexual partners in the last 6 months</b>				
1-2	2/100	2.0	1.0	-
3 or more	9/205	4.4	4.67** (1.75 – 11.98)	-
<b>Even had anal sex with men</b>	1/52	1.9	0.50 (0.17 – 1.45)	-
<b>Ever received money, goods or services in exchange for sex</b>	4/98	4.1	0.79 (0.40 – 1.57)	-
<b>Ever engaged in sex with tourists as a beach boy</b>	9/240	3.8	0.40** (0.22 – 0.74)	-
<b>Composite GARPR knowledge (all correct)</b>	4/68	5.9	1.47 (0.74 – 2.9)	-
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>	9/50	18.0	9.83*** (5.25 – 18.39)	-

Table 231: Factors associated with having an HIV test in the past 12 months and knowing the result, BB in Galle (Continued)

	HIV test in the past 12 months		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
Contact with a health peer educator in the community in the last 6 months	6/12	50.0	19.97*** (9.36 – 42.58)	-
Condom used at last sex with tourist	9/163	5.5	-	-

\* p<0.05 \*\* p<0.01 \*\*\* p<0.001

Amongst BB in Galle, independent factors associated with condom use at last sex with tourist include aged 45 and over (AOR 3.54), receiving free condoms in the last 12 months (AOR 3.53), and aged 25-34 (AOR 2.63).

Table 232: Factors associated with condom use at last sex with a tourist, BB in Galle

	Condom use at last sex with a tourist		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	163/239	68.2	-	-
<b>Age</b>				
<25	76/119	63.9	1.0	1.0
≥ 25	63/83	75.9	1.64** (1.16 – 2.31)	2.63*** (1.68 – 4.12)
35 – 44	15/2	68.2	1.08 (0.63 – 1.85)	1.48 (0.75 – 2.92)
≥ 45	9/15	60.0	0.80 (0.45 – 1.43)	3.54** (1.39 – 8.98)
<b>Level of education</b>				
≤ Grade 10	58/89	65.2	1.0	1.0
≥ Passed O/L	105/150	70.0	1.29 (0.95 – 1.75)	1.67* (1.11 – 2.52)
<b>Monthly income</b>				
≤20,000	36/55	65.5	1.0	1.0
>20,000	110/154	71.4	1.25 (0.87 – 1.79)	0.95 (0.62 – 1.44)
<b>Number of all sexual partners in the last 6 months</b>				
1	21/27	77.8	1.0	1.0
2	27/40	67.5	1.2 (0.68 – 2.12)	2.48** (1.29 – 4.77)
3 – 5	49/75	65.3	1.01 (0.61 – 1.68)	1.93* (1.06 – 3.53)
6 or more	66/96	68.8	1.00 (0.61 – 1.65)	2.77** (1.49 – 5.15)
<b>Even had anal sex with men</b>	24/41	58.5	0.66* (0.45 – 0.98)	1.50 (0.84 – 2.69)
<b>Ever received money, goods or services in exchange for sex</b>	47/85	55.3	0.43*** (0.32 – 0.59)	0.31*** (0.21 – 0.48)
<b>Composite GARPR knowledge (all correct)</b>	42/54	77.8	1.88** (1.26 – 2.81)	1.67* (1.02 – 2.73)
<b>Received free condoms from NGOs or a health care centre in the last 12 months</b>	37/42	88.1	3.1*** (1.88 – 5.12)	3.53*** (1.81 – 6.90)

Table 232: Factors associated with condom use at last sex with a tourist, BB in Galle (Continued)

	Condom use at last sex with a tourist		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
Contact with a health peer educator in the community in the last 6 months	11/11	100.0	-	-
HIV test in the last 12 months and knows the result	9/9	100.0	-	-

Independent factors associated with prevention programme reach amongst BB in Galle include ever had anal sex with men (AOR 2.59), aged 25 and over (AOR 2.37) and higher education (passed O/Levels: AOR 1.85).

Table 233: Factors associated with prevention programme reach (been condoms in last 12 months and know where to go for an HIV test), BB in Galle

	Condom use at last sex with a tourist		Unadjusted OR (95% CI)	Adjusted OR (95%CI)
	n/N	%		
<b>Total</b>	28/306	9.2	-	-
<b>Age</b>				
<25	12/161	7.5	1.0	1.0
≥ 25	16/145	11.0	1.54 (0.98 – 2.43)	2.37** (1.34 – 4.20)
<b>Level of education</b>				
≤ Grade 10	9/99	9.1	1.0	1.0
≥ Passed O/L	19/207	9.2	1.15 (0.70 – 1.88)	1.85* (1.01 – 3.38)
<b>Monthly income</b>				
≤20.000	6/74	8.1	1.0	1.0
>20.000	18/193	9.3	1.07 (0.62 – 1.85)	0.88 (0.47 – 1.65)
<b>Number of all sexual partners in the last 6 months</b>				
1	5/143	11.6	1.0	1.0
2	5/57	8.8	0.80 (0.36 – 1.81)	1.87 (0.65 – 4.34)
3 – 5	7/98	7.1	0.83 (0.40 – 1.70)	1.59 (0.66 – 3.84)
6 or more	11/107	10.3	1.33 (0.67 – 2.64)	2.44* (1.03 – 5.75)
<b>Even had anal sex with men</b>				
	6/52	11.5	1.47 (0.84 – 2.58)	2.59* (1.15 – 5.82)
<b>Ever received money, goods or services in exchange for sex</b>				
	6/98	6.1	0.62 (0.36 – 1.08)	0.33** (0.15 – 0.70)





## 12. Discussion

This section of the report starts off by providing contextual information for comparison of data across all available data sources in Sri Lanka and findings from this IBBS survey. This section then provides regional summaries across FSW and MSM, as they were evaluated across multiple districts. Conclusions are then presented for each key population, with evidence informed recommendations for moving forward.

### 12.1 GARPR indicators, comparison across available data in Sri Lanka

The Global AIDS Response Progress Reporting (GARPR) indicators (previously known as UNGASS indicators) were until 2012 reported at the global level every second year; however, from 2013 data is now collected annually. For the first time, Sri Lanka can now report on all GARPR indicators amongst key populations in the next annual reporting period, due to the success of this IBBS survey. Overall, Sri Lanka is performing poorly across most GARPR indicators for key populations, with the exception of condom usage amongst FSW.

It is difficult to compare existing data in Sri Lanka around GARPR indicators, as the few surveys that have been done, have been done in a non-standardized way whereby questions are asked in different formats, not allowing for comparison of data. For example, while PWID were included in the BSS in 2006/7, the sample size was small, and therefore findings could not be presented in the UNGAS (now called GARPR) reporting in 2010. Furthermore, of the prevention programmes indicator which is a composite variable comprising 1. Do you know where you can go if you wish to receive an HIV test, and 2. In the last twelve months, have you been given condoms? (e.g. through an outreach service, drop-in centre or sexual health clinic), the second question was not asked in the survey, and therefore this indicator could not be computed. Furthermore, for the GARPR composite indicator for knowledge, the individual five questions to compute this indicator were asked in a slightly different manner in the 2006 BSS questionnaire, and therefore a composite calculation is difficult. For this reason, the five individual questions are presented in the table.

Despite the comparison challenges, some general observations can be made for the data across the various data points; however it is important to note that in order to establish a trend, three data points are needed, and for any one key population and indicator, this is not yet available in Sri Lanka. The first general observation is that amongst FSW and MSM, the HIV prevalence is higher in 2014 than in previous estimates from 2009 sentinel surveillance; however given the differences in methodology, where the IBBS Survey uses representative sampling (RDS) compared with sentinel surveillance, which is essentially biased to those who seek out health services. IBBS surveys are more representative of the entire population. With these limitations in mind, condom use and testing indicators can also be compared between 2009 and 2014, amongst FSW and MSM (Table 234). Amongst FSW, condom usage is slightly elevated (92.96% in 2014; 90.5% in 2009), while testing is slightly reduced (35.01% in 2014; 42.6% in 2009), and this pattern is reversed amongst MSM with condom usage slightly decreased in 2014, (57.94% in 2014; 63.7% in 2009) and testing slightly increased (15.42% in 2014; 13.6% in 2009). Unfortunately, there are no two data points for any one indicator amongst PWID. Lastly, for BB condom usage (67.1% in 2014; 71.4% in 2009) and testing (4.3% in 2014; 54.2% in 2009) both appear to be lower in 2014.

**Table 234: Key indicators, comparison across key populations**

GARPR Indicator	BSS 2006/7	Sentinel Data 2011	IBBS 2014 <sup>130</sup>
<b>Female sex workers (FSW)</b>	%	%	%
HIV prevalence	n/a	0.2%-0.9% <sup>131</sup>	0.81
Syphilis prevalence (active)	n/a	n/a	0.98
Syphilis prevalence (active and non active)	n/a	2.9%	6.4% <sup>132</sup>
Composite knowledge	No data	n/a	34.93
Used a condom at last sex with a client	90.5	n/a	92.96
Tested for HIV in the past 12 months and knows result	43.97	n/a	35.01
Prevention programmes: 1. Do you know where you can go if you wish to receive an HIV test? AND 2. In the last twelve months, have you been given condoms? (e.g. through an outreach service, drop-in centre or sexual health clinic) received free condoms from NGOs or a health care centre in the last 12 months	No data	n/a	29.8
<b>Men who have sex with men (MSM)</b>			
HIV prevalence	n/a	0.48	0.88
Syphilis prevalence (active)	n/a	n/a	1.96
Syphilis prevalence (active and non-active)	n/a	7.5%	1.4%-5.6% <sup>133</sup>
Composite knowledge	No data	n/a	30.46
Used a condom at last sex (with non regular partner) <sup>134</sup>	63.7	n/a	57.94
Tested for HIV in the past 12 months and knows result	13.6	n/a	15.42
Prevention programmes: 1. Do you know where you can go if you wish to receive an HIV test? AND 2. In the last twelve months, have you been given condoms? (e.g. through an outreach service, drop-in centre or sexual health clinic) received free condoms from NGOs or a health care centre in the last 12 months	No data	n/a	19.3
<b>People who inject drugs (PWID)</b>			
HIV prevalence	n/a	n/a	0.0
Syphilis prevalence (Active and inactive)	n/a	1.2%	0.0
Composite knowledge	No data	n/a	33.3
Used a condom at last sex	No data	n/a	24.0

<sup>131</sup> Aggregate estimates across three districts for FSW (Colombo, Galle, Kandy) and MSM (Colombo, Galle, Anuradhapura), for PWID Colombo only, and for BB Galle only

<sup>132</sup> Period prevalence of HIV among FSW was 0.2% TO 0.9%. Only Western province was able to enrol adequate number of FSW for the survey. Northern & Eastern 10 provinces only enrolled a small number of FSW.

<sup>133</sup> In the 2014 IBBS there were only cases of syphilis amongst FSW in Colombo, this is not a national prevalence estimate, but rather an estimate for syphilis (active and non-active) for FSW in Colombo.

<sup>134</sup> The GARPR indicator does not specify regular or casual partner, but the BSS 2006/7 data is disaggregated by these two categories, and as such casual / non regular partner is being used for comparison purposes

Table 234: Key indicators, comparison across key populations (Continued)

GARPR Indicator	BSS 2006/7	Sentinel Data 2011	IBBS 2014 <sup>130</sup>
Tested for HIV in the past 12 months and knows result	No data	n/a	8.7
Prevention programmes: 1. Do you know where you can go if you wish to receive an HIV test? AND 2. In the last twelve months, have you been given condoms? (e.g. through an outreach service, drop-in centre or sexual health clinic) received free condoms from NGOs or a health care centre in the last 12 months	No data	n/a	4.1
Used sterile injecting equipment (e.g. needle and syringe) at last injection	No data	n/a	50.7
<b>Beach boys (BB)<sup>135</sup></b>			
HIV prevalence	n/a	n/a	0.0
Syphilis prevalence	n/a	n/a	0.0
Composite knowledge	No data	n/a	20.1
Used a condom at last sex with a casual female partner <sup>136</sup>	71.4	n/a	70.2%
Tested for HIV in the past 12 months and knows result	54.1	n/a	4.3
Prevention programmes: 1. Do you know where you can go if you wish to receive an HIV test? AND 2. In the last twelve months, have you been given condoms? (e.g. through an outreach service, drop-in centre or sexual health clinic) received free condoms from NGOs or a health care centre in the last 12 months	No data	n/a	7.8

n/a: Not applicable, not typically collected in this type of survey, or not part of the objectives at the time  
No Data: Unable to compute/report as data collection did not meet the GARPR requirements.

## 12.2 Key indicators, comparison across districts

Both FSW and MSM were each surveyed across three districts; and while each should be interpreted as their own individual data sets, analysis across regions can also be undertaken for general informational purposes, to ascertain regional differences. Graphs are presented for key variables of interest, most notably GARPR indicators.

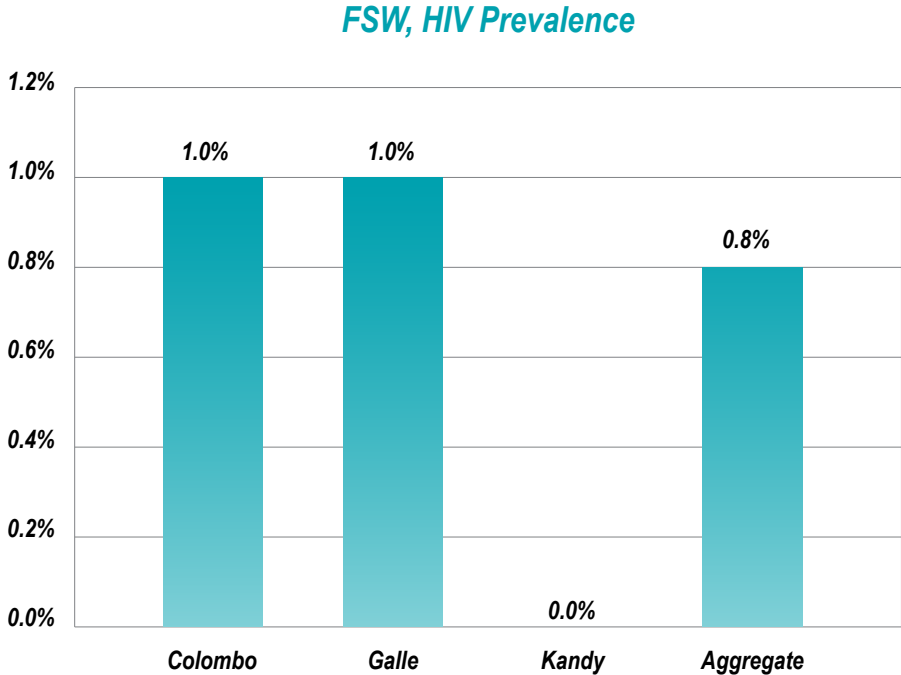
### 12.2.1 Female sex workers

HIV prevalence amongst FSW in Colombo and Galle is the same, at one percent while prevalence in Kandy zero, with no cases of HIV detected (Figure 28). The aggregate prevalence is 0.8%.

<sup>135</sup> Beach boys are not officially included within the GARPR reporting process as a key population, and therefore do not have dedicated GARPR indicators, a selection of the indicators from MSM and FSW, where appropriate, have been selected for comparison purposes

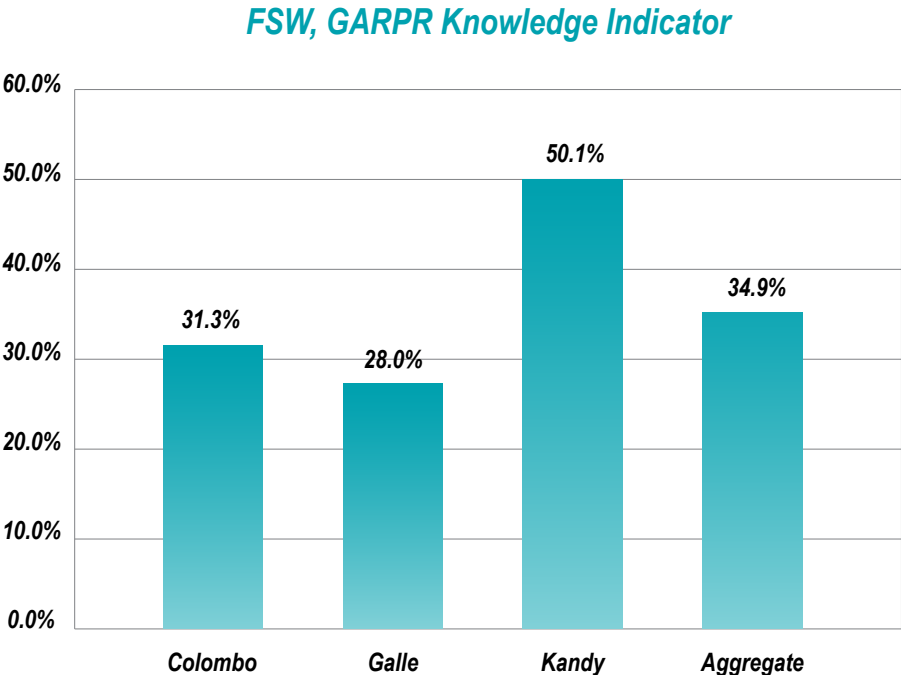
<sup>136</sup> Note that the IBBS 2014 population estimate is for condom usage at last sex with a casual female partner, among those whose last casual partner was female (183/250)

**Figure 28: HIV prevalence across all districts (GARPR), FSW**



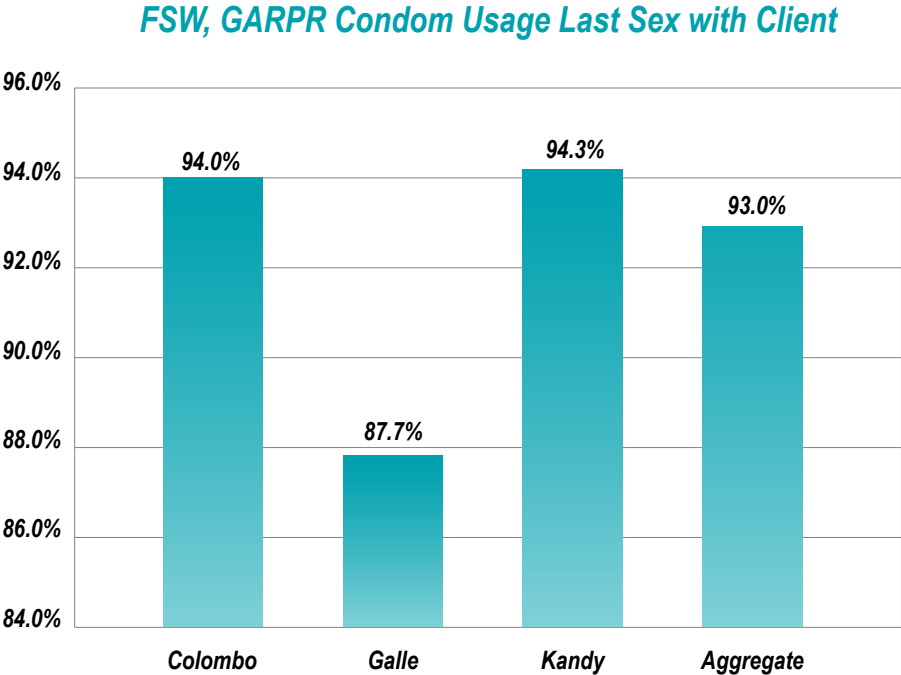
Comprehensive knowledge amongst FSW appears to be highest in Kandy with just over half of all FSW (50.1%) correctly identifying ways of preventing HIV and identifying common misconceptions, followed by Colombo (31.3%) and Galle (28.8%)(Figure 29). The aggregate prevalence is 34.9.0%.

**Figure 29: Comprehensive knowledge across all districts (GARPR), FSW**



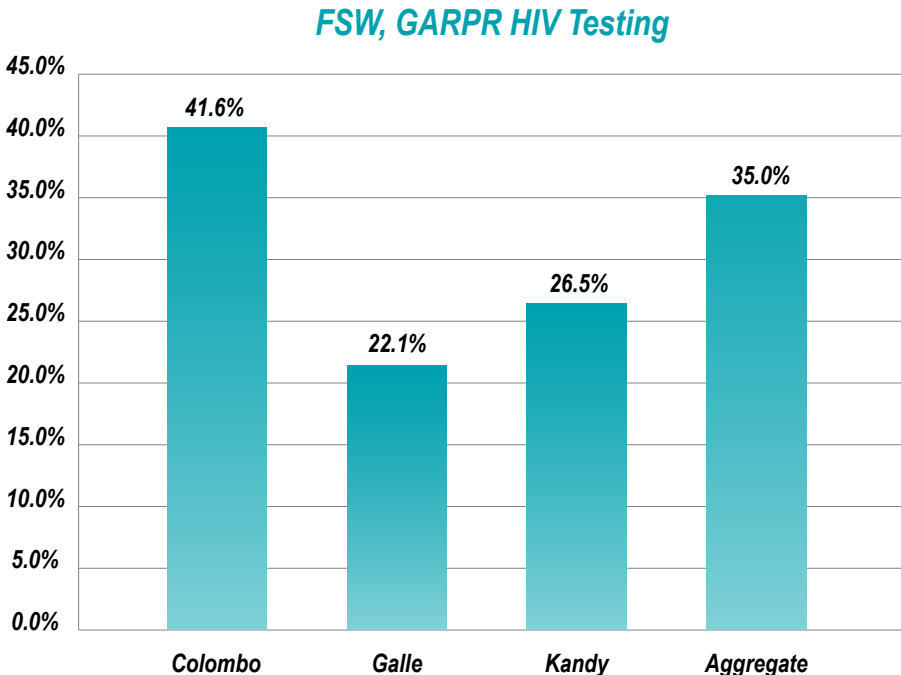
Condom usage is highest amongst FSW in Colombo, with nearly all FSW using a condom at last sex with a client, followed by Galle (87.7%) and Kandy (94.3%)(Figure 30). The aggregate prevalence is 93.0%.

**Figure 30: Condom usage at last sex with client across all districts (GARPR), FSW**



Similarly, testing amongst FSW appears to be highest in Colombo (41.6%), followed by Kandy (26.5%) and Galle (22.1% (Figure 31). The aggregate prevalence is 35.0%.

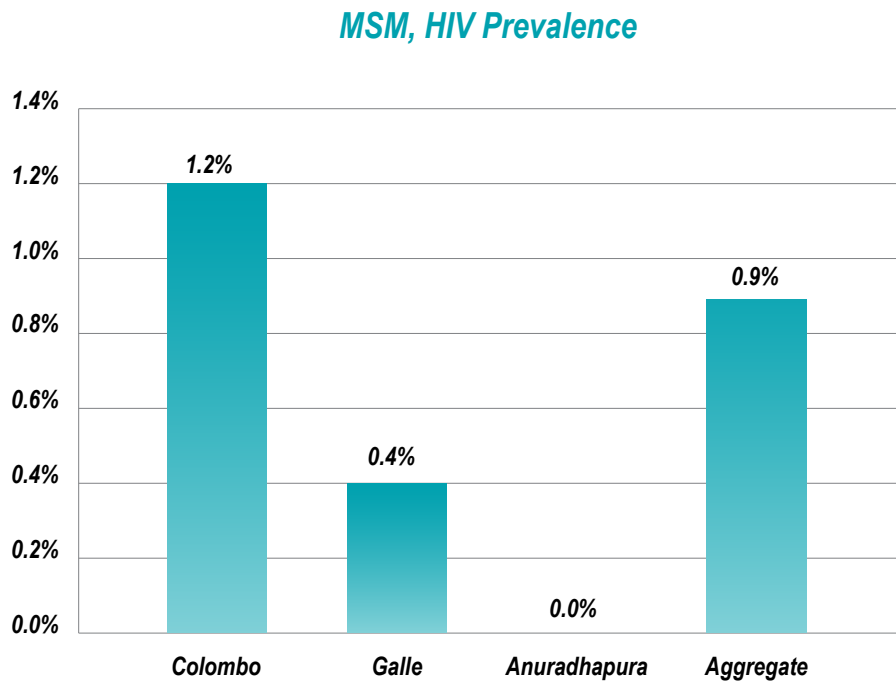
**Figure 31: HIV testing across all districts (GARPR), FSW**



### 12.2.2 Men who have sex with men

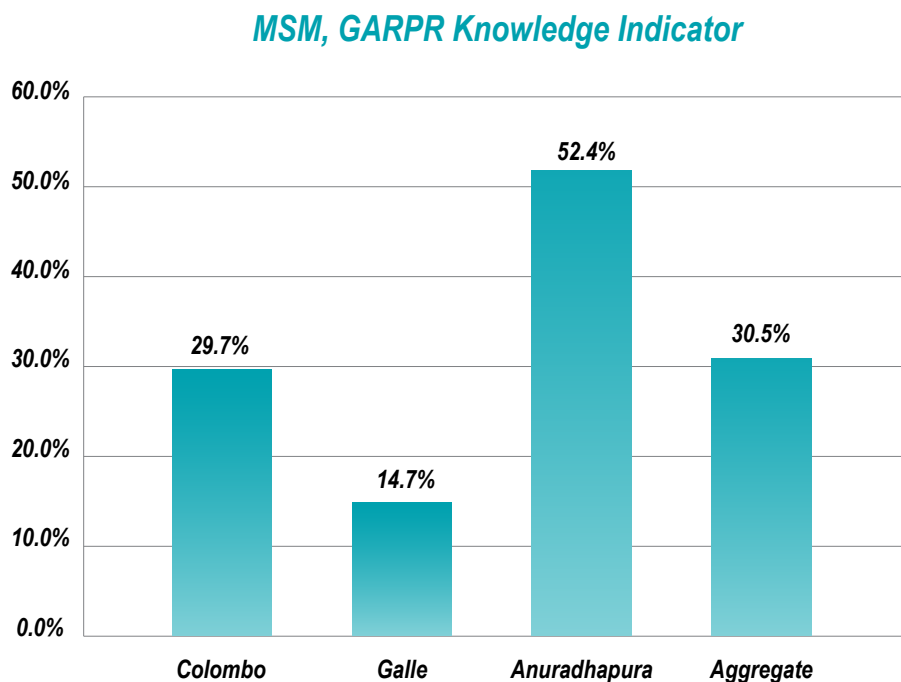
HIV prevalence amongst MSM is low, with Colombo and Galle the only districts with any HIV positive respondents (1.2% and 0.4%, respectively) (Figure 32). Aggregate HIV prevalence is 88.0%

**Figure 32: HIV prevalence across all districts (GARPR), MSM**



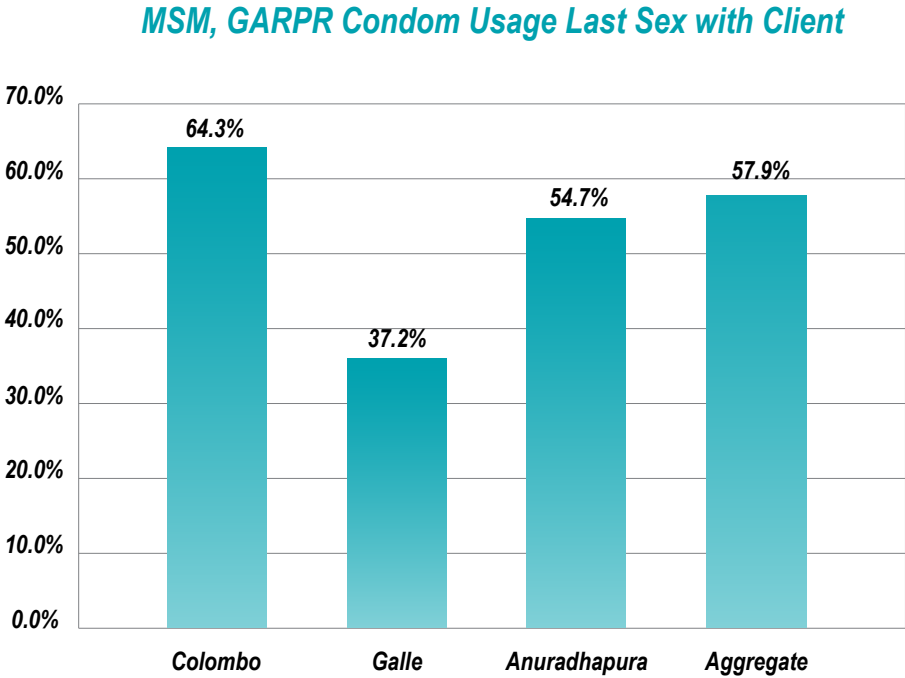
Comprehensive knowledge amongst MSM is highest in Anuradhapura with just over half (52.4%) of all MSM correctly identifying ways of prevention and rejecting major misconceptions, over a fifth in Galle (14.7%) and just under a third (29.7%) in Colombo (Figure 33). Aggregate knowledge is 30.5%.

**Figure 33: Comprehensive knowledge across all districts (GARPR), MSM**



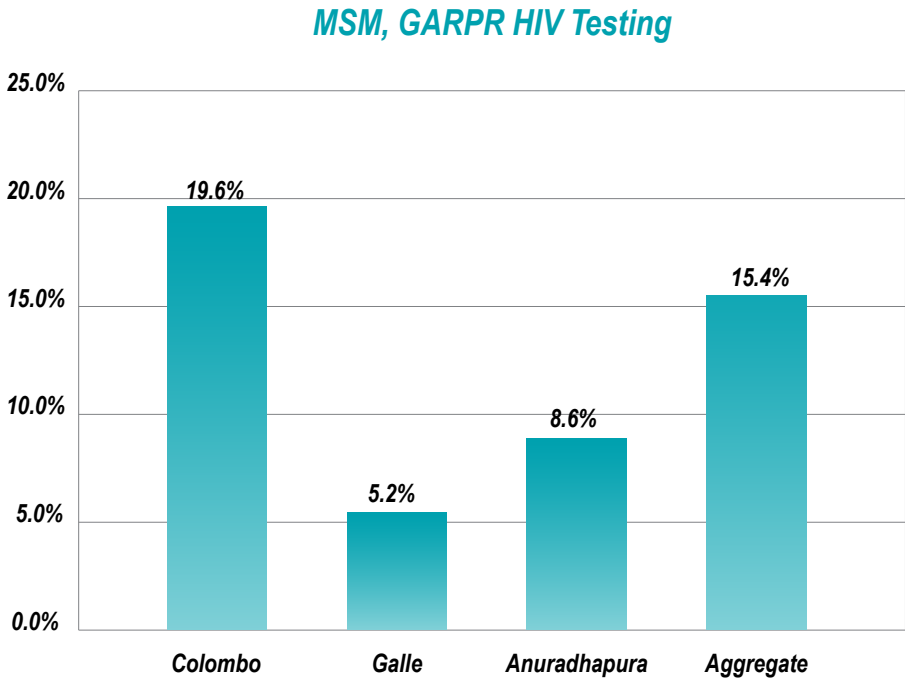
Condom usage at last anal sex is highest in Colombo (64.3%), followed by in Anuradhapura (54.7%), followed by Galle (37.2%)(Figure 34). Aggregate condom usage is 57.9%.

**Figure 34: Condom usage at last sex across all districts (GARPR), MSM**



HIV testing is exceptionally low, with less a fifth of MSM across all three districts having been for an HIV test and received their results in the last 12 months (Figure 35). Aggregate HIV testing is 15.4%.

**Figure 35: HIV testing across all districts (GARPR), MSM**





### 12.2.3 Triangulation of qualitative and quantitative data

Based on review of the full audio recordings and transcripts, the following conclusions are drawn from the qualitative data, including those excerpts above.

- **Identity and blurred categories**

The categories and labels do not always represent what the people do or how they see themselves. The tourist guides are offended when called BB, but in reality some of them are sex workers, MSM and tourist guides at the same time. This actually means that their risk behaviour may be higher than expected as they have sexual relationships with many different partners including tourists, male and female, as well as local sexual partners. Same for the MSM in Colombo, some of them see themselves as transgender but also talk about being a male sex worker. The PWID in Colombo also engage in transactional sex, as well as it is mentioned that their partners become FSW to earn extra money.

- **Stigma**

MARP experience a great deal of stigma. For example, FSW and MSM assume they will be stigmatized and are very much afraid to be seen at the centres because of the illegal activities they perform, illustrating perceived stigma. There is also presence of enacted stigma by health providers and others in society. Those FSW who are older started at a later age (for economic reasons), appear to exhibit less fear. The younger ones are hiding and are working at different places, in attempt not to be discovered. Often they start in the garment factory and end up in sex work for better financial gains, or they go overseas (Cyprus and Oman were mentioned) and on return have no income and start exchanging sex. Then there are those whose husbands or male relatives passed away and just need income to sustain their family.

Also the MSM and transgender persons mentioned to experience stigma this can range from within their own families up to in the work place or when they access services. Services should be more welcoming to them and focused more on raising their awareness about sex with multiple partners, use of drugs and how to protect themselves.

- **Quality of STI/HIV services**

The reported quality of services received to date is mixed. Quite some respondents mention they have to pay, there seems to be biased discriminatory counselling and not an application of a harm reduction approach. Only some of the older FSWs at the IBBS site were positive about recent experiences, but it is unclear whether this is simply 'lip service'. Perhaps due to desirability bias, the participants did not feel comfortable being truly honest with the researcher. This is further emphasized as a potential anomaly, because the quantitative data shows that satisfaction with service at Government STD clinics is high, thereby potentially illustrating a fear of providing negative feedback, which may be culturally, or simply in the context of a research environment. The respondents at the IBBS site in Colombo often underlined that they feel secure and that they receive the test results in half an hour, while at the NSACP STD clinics they often wait for days or even a week. This finding came out clearly in many conversations and Monitoring and Supervisory visits, the excellent quality of the testing and treatment at the IBBS site.

- **Networks**

There is an informal network between FSW working in the street and the three wheelers. The three wheelers bring them everywhere and sometimes have a role as pimp and receive a share of the profits. Furthermore, the transgender singers, dancers and performers often live with MSM, they underline that this is for matters of protection and convenience. A remarkable statement was made by older sex workers; some of them talked about marriage of convenience and often that means they live with a policeman and in that way they are better protected. This finding was also found in the formative assessment, but did not come out clearly in the IBB survey results.

- **Power dynamics**

The position of key individuals in positions of power or potentially exploiting positions, is a concern. For example, a policeman supporting his wife doing sex work, or an old man providing a place where a young man can use drugs, or the three wheeler driver who does not only give protection but has more roles as a pimp, a client and a broker.

- **Garment sector**

What appears to be a common step / transition, from working in the garment producing sector to engagement in sex work needs further exploration. Interview data showed respondents who did all three, working at the garment factory, using drugs and having sex with clients. Furthermore, some mentioned that sex work meant higher salaries and therefore chose this route willingly. From experiences with past work in Asia, where the link between garment factory work and sex work is strong, this pathway deserves further exploration. However, the survey data did not show a high usage of drugs amongst FSW.

- **Condoms**

Most respondents brought forward that the condoms provided by the Global Fund, smell and are not of good quality. Some respondents (MSM, FSWs) mentioned that they use condoms except in what they call their 'real' personal sphere (e.g. a husband / boyfriend, or girlfriend / wife). This seems to be verified by the low HIV prevalence.

- **HIV prevalence**

While the HIV prevalence at the time of the qualitative interviews was low, and afterwards upon completion of the survey, anecdotal evidence from various discussions, and from these qualitative interviews, as well as from the survey data, reflect multiple partners, male and female, sharing of needles, and other high risk behaviours. As such, parameters are present for an increase in the HIV and other STI prevalence, if trends are not monitored and interventions are not implemented.

- **Type of sexual activity**

After completion of the qualitative interviews and after a qualitative skills training workshop with NSACP, it was agreed that there is minimal available data around types of sexual practices that are performed. For instance, are older FSW providing more oral sex? When respondents mention they have sex 5 or 10 times, what type of behaviour are they actually engaging in with clients, this may also influence the lower prevalence. Data from the IBBS survey shows that in Colombo, Galle and Kandy, 93.0%, 99.7% and 99.2% of FSW, respectively, have had vaginal sex at last exchange of sex for money.



*NSACP officials who conducted the World AIDS day activities at the Colombo IBBS Site.*

*The officials and trainees after the formative assessment training.*

### 13. Limitations

At the beginning of the survey there was a large number of ‘don’t know’ and ‘refuse to answer’ around the network size questions, which is one crucial piece of information needed in order to analyse RDS data. Fortunately, this issue was caught early enough so that a second measure could be put in place to ensure high quality data was collected going forward. In addition to the interviewers asking the network size question in the interview itself, an additional network size form was implemented, administered by the coupon manager, for every survey respondent. This allowed two independent measures of network size which could be reviewed, to ensure validity of this information collected. A lesson learnt from this experience is the important of training interviewers specifically on how to ask this question to limit missing data. This missing data was most noticeable for the PWID group, hence the interpretations of these findings are limited.

Furthermore, recruitment for certain groups was more difficult than others, specifically recruitment of FSW in Galle and Kandy. Being introduced to ‘connectors’ in the populations were simply not enough to encourage recruitment and for FSW to come to the dedicated research site. It was necessary for the IBBS teams to undergo outreach or rather to use a ‘mobile site’ to brothels and massage parlours, in order to continue recruitment. Ensuring that the team did not in any way disrupt the principles of natural peer recruitment was challenging, but the study team is confident these principles of RDS were maintained.

Additionally, as part of RDS-A population size estimates must be entered into the software to enable population estimates to be generated. Unfortunately, consensus amongst stakeholders is that the current national PSE are underestimated across all groups and districts, particularly amongst PWID. As such, MF, KIT together with the SAC came up with revised estimates to enter into RDSA, which are outlined at the beginning of each section in the results sections, and this is described further in the interpretation of results section as well.

Moreover, at the beginning of the survey there were challenges getting the correct Unicode Sinhala font into the tablets, using the ODK software. After much research and discussions with the ODK global team, this is a common challenge with more difficult fonts and ODK. In the end, a local information technology consulting company in Colombo provided assistance in amending the open source software with a patch. For future surveys using tablets and electronic data collection it is recommended that more time be allocated for this component of the survey (e.g. programming the ODK forms and uploading them to the tablets).

As well, as with RDS studies globally, ensuring respondents are genuine members of the hard to reach population can be difficult. The fact that RDS uses incentives may result in individuals posing as members of the population to obtain the financial incentive. In order to minimize this potential bias, members of the target populations comprised part of the research team and assisted with screening potential study respondents. Furthermore, the modest incentive amount was considered by stakeholders not to have been high enough for individuals to pose as members of the target population.

Also, as previously described, aggregate estimates are provided for FSM and MSM, as data was collected across multiple districts. However, care should be taken in extrapolation as aggregate estimates are not national estimates as RDS cannot give a national estimate, as it is based on social networks. Given these limitations, aggregate estimates have only been provided for a few select key indicators; and whenever possible, all three estimates across the three districts should be provided for reporting.

Finally, for a multiplier method calculation to be undertaken the three criteria required are as follows: 1) The same population definition; 2) Time reference period must be the same; and 3) Catchment area for both the service / institution and the survey must be clear and comparable. Unfortunately, the last condition was not met. It is recommended that the NSACP add a question to their data collection tools about the location where clients live. With that information the two data sources (IBBS and STD clinics) could be aligned in the future. The assumption for the multiplier method is that the population is closed. This is never satisfied completely, but here the migration seems very high, in particular for FSW. It seems they change locations where they work, and also that they travel to a different city than where they live to get tested. A better understanding of the migration patterns is required before trying the multiplier method again.

## 14. Conclusions

Overall, this IBBS collected a sizeable quantity of information on key populations at high risk of HIV in Sri Lanka, providing a second data point in terms of behavioural surveillance, and a first data point for behavioural data as part of an IBBS survey. A summary of GARPR indicators is provided, along with previous estimates, to show comparison data. Conclusions and recommendations are then broken down by individual population, as well as across the four key populations, spanning evidence informed programmatic interventions, research and policy level conclusions and recommendations.

### 14.1 Female sex workers

#### ● Overall

- Overall, GARPR indicators around the biological component are low (aggregate HIV and syphilis prevalence: <1.0%) but many behavioural indicators are not performing well (low testing and low comprehensive knowledge). Condom usage; however, is high amongst FSW.

#### ● Biological test results

- HIV prevalence:
  - Aggregate: 0.81%
  - Colombo: 1.0%
  - Galle: 1.0%
  - Kandy: 0.0%

- Active syphilis prevalence:

Aggregate: 0.98%

Colombo: 1.6%

Galle: 0.0%

Kandy: 0.0%

### ● Demographics

- Most FSW in Colombo and Galle are married, which incites the question, do their husbands know their involvement in sex, and if yes, are they engaged or involved to some degree? If not, is marital / spousal transmission occurring? Further qualitative investigation would help to explore spousal dynamics.

### ● Entry into sex work

- Reasons for first entry into sex work are typically due to financial reasons (not having money or a job) and abandonment by husband, indicating potential for interventions with separated, divorced and widowed high-risk women, with potential for skills training and livelihood interventions.
- The average amount of money earned per last sex act is between 1,276 Rupees (Colombo) and 1,822 (Kandy), which when compared with the typical salary for a lower level employee in Sri Lanka is 36,500/month<sup>31</sup>, the financial incentive is present.

### ● Characteristics of sex work

- Truck stops / three wheeler stops are a commonly reported places where FSW meet clients, thereby providing potential for implementing interventions in truck stops / three wheeler stops / areas of mobility, such as mobile clinics, IEC, etc.
- A common location where sex is being exchanged is hotels, providing an opportunity for engaging with the private sector in a condom distribution strategy.

### ● Male and female condoms and lubricants

- As earlier stated, high condom usage at last sex with a client is present; however, a high number of FSW have been paid more for sex with no condom, therefore interventions targeting clients to raise awareness are needed, as well as condom negotiation skills building with FSW.
- Most condoms are currently obtained from private pharmacies, thereby justifying engagement with the private sector, and a potential for a public/private partnership for condom distribution.
- Currently there is minimal lubricant usage, and a minimal interest in using lubricant in the future; however a feasibility study could look at this in more depth, (e.g. Is there a need? No evidence for this in this study, but could simply be that respondents did not know enough about lubricant and its advantages to comment). The question about interest in using lubricant in the future was only asked from those who had heard of lubricant (very few).

## 14.1.1 Men who have sex with men

### ● Overall

- Overall, GARPR indicators around the biological component are low (aggregate HIV prevalence: <1.0%, and aggregate syphilis prevalence <2.0%) but the behavioural indicators are not performing well (low testing, comprehensive knowledge and condom usage).

### ● Biological test results

- HIV prevalence:
  - Aggregate: 0.9%
  - Colombo: 1.2%
  - Galle: 0.4%
  - Anuradhapura: 0.0%
- Active syphilis prevalence:
  - Aggregate: 1.66%
  - Colombo: 2.4%
  - Galle: 0.3%
  - Anuradhapura: 0.0%

### ● Characteristics of sexual behaviour

- There is no data to support a high presence of intergenerational sex, despite anecdotal evidence and discussions in various meetings and forums. However, it could be that anecdotal evidence refers to a different definition of intergenerational sex (older, but not old enough to qualify for intergenerational for this analysis).

### ● Sexual behaviour

- Anal sex is high amongst MSM across all districts, alongside poor condom usage, clearly providing a pathway for the increased spread of HIV.
- Sex with women present, illustrating the potential for cross-spread amongst key populations, and into the general population.
- Most MSM do not ask HIV status of last partner.

### ● Sex work

- Many MSM have both sold and paid for sex, illustrating further one of the conclusions from the qualitative component, whereby at times identities and boundaries are blurred, between MSM and sex work.

### ● Condom usage

- Condom usage is moderate, with typically half of MSM using condoms at last anal sex with a partner, (highest in Colombo at 64.3%, followed by in Anuradhapura (54.7%), and in Galle (37.2%)); however, the Galle MSM sample was very young, so it could be that they underperform on GARPR indicators due to younger age.
- Condom usage at last sex with female appears to be lower than with males, this phenomenon could be explored further, and if necessary incorporated into the IEC and SBCC materials.

- Condoms not being available was a common reason for lack of condom usage, and as such the current condom distribution strategies should be reviewed for comprehensiveness.
- Blurred sexual identities that are not well understood by service providers.

#### ● **Stigma and discrimination**

- High levels of stigmatization in society, including in the family of MSM, leading to a non-conducive environment for safer sexual practices and access to health services.
- Discrimination was particularly noted through the qualitative work, and meetings with MSM, including the need for awareness and knowledge among the law enforcing authorities (police and judiciary and required legislative reforms).

#### ● **Sexual identities**

- Blurred sexual identities that are not well understood by service providers and that would need to be taken into account for successful prevention and treatment and care programmes.

### 14.1.2 People who inject drugs

#### ● **Overall**

- Overall, GARPR indicators around the biological component are low (HIV and syphilis prevalence is 0%); however, the behavioural indicators are not performing well (low testing, low comprehensive knowledge, condom usage, and safe injecting practices).

#### ● **Biological test results**

- HIV prevalence (Colombo): 0.0%
- Active syphilis prevalence (Colombo): 0.0%

#### ● **Characteristics of injecting drug behaviour**

- Most PWID have been injecting for between six to 20 years
- Frequency of injecting is not high, with most PWID only injecting two to four times a month, once a month, or less, which may be influenced by the shortage of heroine at the time of the survey.
- Heroin is the most commonly used drug during injections.



*Some of the participants at the dissemination workshop held after the IBBS Survey*

- **Sex work**

- Low prevalence of selling sex, including selling sex to obtain drugs; however over a quarter have given money, goods or services to have sex with a partner.

- **Condom usage**

- Condom usage is low, with typically less than a quarter of PWID using a condom at last sex with a partner.
- A common reason for not using condoms is 'never heard of them', indicating the need for increased education and awareness.

- **Safe injecting practices**

- Substitution treatment and needle and syringe exchange programmes focused on enhancing safe injection practices seem absent.
- A considerable percentage of PWID share their injection equipment.
- Not all PWID have a clear understanding and or misconceptions about safe injection practices.
- There is no information on the size of the sharing network itself between PWID.
- Unsafe disposal of injecting equipment (needles and syringes) highly present, with most simply throwing them in the trash or in to open water, awareness campaigns around proper disposal are urgently needed.

### 14.1.3 Beach boys

- **Overall**

- Overall, GARPR indicators around the biological component are low (HIV and syphilis prevalence is 0.0%), but many behavioural indicators are not performing well (low testing and low comprehensive knowledge). Condom usage; however, is high relatively amongst BB, compared with other MARP (e.g. MSM and PWID), although there is room for improvement.

- **Biological test results**

- HIV prevalence (Galle): 0.0%
- Active syphilis prevalence (Galle): 0.0%

- **Nature of interaction with tourists**

- Most BB act as tour guides or hotel staff.
- More than a third of BB have sex with tourists.
- Frequency of engaging in sex with tourists varies, with just under half indicating 'sometimes', and only just over ten percent indicating 'every time'.
- More than a quarter received money the last time they had sex with a tourist.
- Most of the tourists are European.

- **Sex work**

- Nearly one third have received money, gifts, or favours in exchange for sex, and nearly a quarter have ever paid for sex.



- **Condom usage**

- Over two thirds used a condom last time they engaged in sex with a tourist.

#### 14.1.4 Across all groups

- **HIV Testing**

- While some MARPs generally know where to obtain an HIV test, very few have ever been tested, and even less have been for a test in the last 12 months and received their results.
- Reasons for not getting HIV tests include not knowing where to go, too busy, and low risk perception.
- Those who have been tested, predominantly seek services at Government STD clinics, and are satisfied or very satisfied with the services they receive; however, qualitative and anecdotal reports from the IBBS sites show respondents preferred the IBBS sites as they found the sites friendlier, more affordable, and with less wait times.

- **Awareness and knowledge**

- More than three quarters of key populations have heard of HIV and AIDS, but given the extent of awareness raising and programmes to date, and that these populations are more at risk, as well as more targeted by campaigns and resources, this figure would be expected to be higher.
- Main sources of HIV information are currently coming from health services, which raises the question what impact have the campaigns to date had? The need for an impact evaluation of the current awareness, information, education and communication (IEC) and social behaviour change communication (SBCC) campaigns should be explored. Few FSW mentioned NGOs, it would be interesting to see what impact and value for money the current modalities for raising awareness are having.

- **Reason for participation in the IBBS**

- One of the main reasons for participating in IBBS survey is for testing, and most HIV tests are currently being done at the Government STD clinics – expanding choice of setting for testing could potentially expand access to testing, across the diverse groups. Options include mobile and moonlight HTC, and engagement with the private sector to expand testing to additional, non-Government clinic venues.

- **Media**

- Overall, media usage is not particularly high, with TV as the most frequent outlet, but radio and newspaper not showing high volumes of usage.
- Internet usage is poor, and therefore online activities and targeting should not be a priority at this time.
- Mobile phones usage is high, thereby providing the potential for m-health projects, as many of the key populations indicated they would be interested in receiving HIV and health related text message.

- **Alcohol and drug usage**

- Alcohol and drug consumption amongst FSW, MSM and BB is not particularly high; however, amongst those few who have injected, most shared injecting equipment.

- **Stigma**

- High levels of stigma across all key populations and districts, while most respondents would be willing to care for an HIV positive family member, most do not believe an HIV positive student should be allowed to go to school, and would not buy food from an HIV positive food seller.

- **STI care seeking behaviour**

- Most respondents go to Government STD clinics for HIV testing, but not when they have symptoms of an STI, the first point of call is typically a private pharmacy or chemist, illustrating that sentinel surveillance for STIs may be underestimated.

## 15. Recommendations

### 15.1 Increase condom awareness and usage

Formulation and implementation of a multi-sectoral national condom policy / strategy, which outlines expansion of condom promotion and distribution through expanded channels, including the potential for private sector collaboration, including pharmacies, hotels, around parks and public bathrooms and other venues. This strategy should include special attention enhancing condom use in difficult situations (e.g. in parks, public bathrooms, or when having unplanned sexual contacts) and address activities to reduce police arrest on the basis of carrying condoms. Interventions with clients of sex workers to carry and use condoms should be implemented, and referred to in the condom strategy. Finally, creation of an enabling environment through ongoing advocacy for access to condoms would be the ultimate result of this comprehensive condom strategy.

#### 15.1.1 Increase HIV testing

A multi-stage approach to increase HIV testing amongst key populations is needed. Firstly, a review of the current peer educator model to assess strengths, weaknesses and areas for improvement, is needed. Secondly, the current social and behaviour change communication (SBCC) interventions targeting key populations should be amended as needed, and where possible expanded, given the limited number of key populations who have been in contact with peer educators to date. These programmes should be closely monitored to report on how many existing and new clients are reached each month. The importance of HIV testing should be a primary focus, and peer educators should be supported to develop strategies and models for sourcing new key population sub groups, while maintaining contact with existing groups as well. Lastly, feasibility and acceptability of rapid testing has been proven, and therefore could be incorporated across STD clinics, in order to reduce waiting times (as mentioned as a positive for IBBS testing sites) so that clients could receive same day results<sup>137</sup>.

Next, given the limited outlets for HIV testing currently, and the positive feedback from the IBBS sites, expansion of testing to additional outlets is needed. For example, moonlight HTC, outreach and mobile HTC. Furthermore, general health practice testing including provider initiated testing and counselling (PITC) is a possibility. Health service providers can be trained to ask questions regarding high-risk sexual behaviour. If and when patients disclose to high-risk sexual activity,

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<sup>137</sup> It is noted that the IBBS survey included financial incentives for participation, and human resources and logistics are very different for a survey, versus routine programming at STD clinics these factors would need to be considered before effecting any changed to testing protocols at STD clinics.

targeted messaging, including information on the importance of correct and consistent condom usage and the need for routine HIV testing should be conveyed.

### 15.1.2 Increase participation to address HIV

Documented approaches on key population engagement in similar contexts should be explored and piloted in the Sri Lankan context. For example, MARP led outreach, development of new and continuation of existing of MARP collectives and social groups, for strengthening of community systems. Specifically, the need for an expanded harm reduction approach for PWID to address misconceptions around safer injection practices should be explored.

### 15.1.3 Reduce stigma around key populations and HIV

Social, institutional and personal stigma against key populations should be addressed through general population information and awareness campaigns. Furthermore, general population HIV awareness raising should continue, as HIV stigma is also present amongst MARP, and they can be reached through these same modalities for general HIV information. Furthermore, sensitization of key populations around HIV in general is needed. Lastly, sensitization of religious, political, community leaders and the media is needed to address HIV-related stigma and discrimination, supporting the development and adoption of policies that improve equitable and affordable access to prevention, treatment, care and support services and mainstreaming HIV into other sectoral strategies. Discrimination amongst all MARP was particularly noted through the qualitative work and at the data validation workshops after completion of the IBBS survey, including the need for awareness raising among law enforcing authorities (police and judiciary and corresponding legislative reforms).

### 15.1.4 Innovate with HIV interventions

The potential for m-health interventions should be explored, given the high ownership of mobile phones amongst all key populations. M-health interventions range in scope from health and HIV/STI information blasts, to call centres and SMS response lines, to quizzes and competitions to engage young people in conversations and participation. These interventions should be well planned out and evaluated for impact and cost effectiveness. Furthermore, exploring interventions to improve communication and ability to ask, respond and facilitate questions regarding sexual behavior between service providers and clients, and address motivation of clients to change behavior. It is suggested to explore “Motivational Interviewing”, a method that works on facilitating and engaging intrinsic motivation within the client in order to change behavior. Group settings and peer led interventions addressing issues of intimacy, relationships, coping skills, interpersonal skills, relapse prevention, sexual negotiation and communication skills could be considered.

### 15.1.5 Additional Research and M&E

- **Repeated IBBS surveys**

A follow-up IBBS survey should be conducted again when resources permit. This would provide a third data point for multiple indicators, and a second data point for standardized GARPR indicators, allowing trend analysis to be undertaken. Funding should be secured and the activity appropriately planned, using the same research protocol and data collection tools, to allow comparability of the data. Lessons learnt from this IBBS should be utilized, to ensure the success of the survey, for example, the use of a shorter, more manageable tool should be explored, while also exploring expansion to additional districts and key populations of interest.

- **Continued sentinel surveillance**

Sentinel surveillance is excellent modality for monitoring prevalence routinely. The possibility of adding in routine behaviour questionnaires to this surveillance should be explored. Furthermore, the validity of the sentinel findings should be constantly reviewed as new information emerges. For example, most respondents go to Government STD clinic for HIV testing, but not when they have symptoms of an STI, the first point of call is typically a private pharmacy or chemist, illustrating that sentinel surveillance for STIs may be underestimated. Furthermore in routine NSACP reporting, it requires the key population to disclose to the counsellor their high-risk behaviour, data from this IBBS shows this is not always the case. Improved quality of counselling and ongoing training of staff should be emphasized, and reviewed regularly.

- **Improved PSE**

The general consensus amongst stakeholders is that the current national PSE is greatly underestimated, and as such the PSE exercise should be repeated, and methodologies improved upon, based on lesson learnt, in the coming years. Ideally, multiple types of PSE would be implemented continuously for continual revised estimates. The multiplier method in particular could not be calculated in this IBBS survey due to limited data around catchment area in the current routine data from STD clinics. As such, it is recommended that the NSACP add a question to their data collection tools about the location where clients live. With that information the two data sources (further IBBS surveys and STD clinics) could be aligned in the future for calculation of multiplier questions to estimate population sizes.

- **Additional research**

Review of the current peer educator model to assess strengths, weaknesses, impact and areas for improvement given the limited number of key populations who have been in contact with peer educators to date. As part of this review, the current BCC packages should be reviewed in detail, and result in the development of tailor-made strategies for each MARP and sub-populations, as currently the existing package is generic. Operational research to explore and document community perceptions, identify gaps in knowledge, attitudes, and skills, and develop strategies to increase the correct and consistent use of condoms should be explored, and incorporated into the new national condom strategy. Exploration of the concept of 'husbands of convenience' amongst FSW could be explored, to delve into whether this is a protective factor around risk behaviour. Also, exploration of the links between the garment industry and entry into sex work could be investigated. Furthermore, it is highly recommended that STD clinic data collection be refined to capture catchment areas more clearly, to enable multiplier questions to be calculated from future IBBS survey data. Finally, given the experience using qualitative research methods for the formative assessment, capacity building around qualitative methods is highly recommended, amongst HIV programme staff and NGOs. Finally, exploration into the need for expanded substitution programmes amongst PWID is recommended, does the need exist, would the PWID be interested, etc.

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## Annex A – GARPR indicators disaggregated by age

### FSW Colombo

Characteristic	< 25				≥ 25			
	Sample proportions		Population estimates		Sample proportions		Population estimates	
	n/N	%	%	95% CI	n/N	%	%	95% CI
HIV	0/69	0	0	-	6/536	1.1	1.2	0.2 – 2.2
Syphilis – Active	1/69	1.4	1.2	0 – 3.2	6/536	1.1	1.7	0.4 – 3.0
Syphilis – Non-Active	1/69	1.4	0.9	0 – 2.6	27/536	5.0	5.3	3.1 – 7.6
Syphilis (active and non-active)	2/69	2.9	2.1	0 – 4.7	33/536	6.2	7.0	4.3 – 9.7
Used a condom at last sex with a client	64/69	92.8	94.0	89.4 – 98.8	503/536	94.0	94.0	91.8 – 96.1
Tested in the last 12 months and knows result	24/69	34.8	40.7	26.0 – 55.7	237/536	44.2	41.8	37.1 – 46.1
Reached with HIV prevention programs (received free condoms and know where HIV testing can be obtained)	10/69	14.5	13.0	4.5 – 21.3	171/536	31.9	30.3	25.9 – 34.5
Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	29/69	42.0	35.6	22.3 – 48.3	166/536	31.0	30.8	26.6 – 34.9



## FSW Galle

Characteristic	< 25				≥ 25			
	Sample proportions		Population estimates		Sample proportions		Population estimates	
	n/N	%	%	95% CI	n/N	%	%	95% CI
HIV	0/19	0	0	-	4/283	1.4	1.1	0.07 – 2.0
Syphilis – Active	0/19	0	0	-	0/283	0	0	-
Syphilis – Non-Active	0/19	0	0	-	0/283	0	0	-
Syphilis (active and non-active)	0/19	0	0	-	0/283	0	0	-
Used a condom at last sex with a client	19/19	100	100	-	250/283	88.3	86.7	82.1 – 90.8
Tested in the last 12 months and knows result	2/19	10.5	8.5	0 – 19.2	70/283	24.7	23.3	17.9 – 28.3
Reached with HIV prevention programs (received free condoms and know where HIV testing can be obtained)	7/19	36.8	37.3	16.9 – 57.2	115/282	40.8	42.7	36.0 – 49.7
Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	7/19	36.8	34.5	14.6 – 53.8	77/282	27.3	27.5	21.8 – 33.1

## FSW Kandy

Characteristic	< 25				≥ 25			
	Sample proportions		Population estimates		Sample proportions		Population estimates	
	n/N	%	%	95% CI	n/N	%	%	95% CI
HIV	0/31	0	0	-	0/323	0	0	-
Syphilis – Active	0/31	0	0	-	0/323	0	0	-
Syphilis – Non-Active	0/31	0	0	-	0/323	0	0	-
Syphilis (active and non-active)	0/31	0	0	-	0/323	0	0	-
Used a condom at last sex with a client	30/31	96.8	97.3	93.1 - 100	308/323	95.4	94.0	90.7 - 97.2
Tested in the last 12 months and knows result	5/31	16.1	13.0	1.7 - 23.6	90/323	27.9	27.8	21.9 - 33.7
Reached with HIV prevention programs (received free condoms and know where HIV testing can be obtained)	4/31	12.9	9.4	0.8 - 17.2	87/323	26.9	26.1	20.2 - 31.7
Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	11/30	36.7	27.1	10.7 - 41.5	172/323	53.3	52.2	22.8 - 59.5

## MSM Colombo

Characteristic	< 25				≥ 25			
	Sample proportions		Population estimates		Sample proportions		Population estimates	
	n/N	%	%	95% CI	n/N	%	%	95% CI
HIV	1/145	0.7	0.8	0 – 2.4	5/359	1.4	1.4	0 – 2.9
Syphilis – Active	0/145	0	0	-	9/359	2.5	3.5	0.4 – 6.8
Syphilis – Non-Active	4/145	2.8	2.1	0 – 4.2	15/359	4.2	3.7	1.5 – 5.8
Syphilis (active and non-active)	4/145	2.8	2.1	0 – 4.2	24/359	6.7	7.2	3.6 – 11.0
Used a condom at last sex with a client	91/140	65.0	63.9	53.2 – 74.5	235/347	67.7	64.4	57.7 – 70.7
Tested in the last 12 months and knows result	26/145	17.9	13.8	7.7 – 19.3	90/359	25.1	22.4	16.1 – 28.2
Reached with HIV prevention programs (received free condoms and know where HIV testing can be obtained)	29/145	20.0	16.7	9.4 – 23.5	91/359	25.3	23.1	16.7 – 29.2
Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	37/144	25.7	23.8	15.0 – 32.3	130/358	36.3	32.6	26.7 – 38.0

## MSM Galle

Characteristic	< 25				≥ 25			
	Sample proportions		Population estimates		Sample proportions		Population estimates	
	n/N	%	%	95% CI	n/N	%	%	95% CI
HIV	0/267	0	0	-	1/88	1.1	1.5	0 – 3.7
Syphilis – Active	0/267	0	0	-	1/88	1.1	1.2	0 – 2.8
Syphilis – Non-Active	2/267	0.7	1.1	0 – 2.7	2/88	2.3	2.2	0 – 4.9
Syphilis (active and non-active)	2/267	0.7	1.1	0 – 2.7	3/88	3.4	3.3	0.2 – 6.5
Used a condom at last sex with a client	91/264	34.5	34.0	28.2 – 39.6	42/88	47.7	46.8	36.0 – 57.3
Tested in the last 12 months and knows result	15/267	5.6	5.2	2.0 – 8.3	5/88	5.7	5.2	1.9 – 8.3
Reached with HIV prevention programs (received free condoms and know where HIV testing can be obtained)	30/267	11.2	9.8	5.5 – 13.4	11/88	12.5	10.9	2.4 – 18.4
Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	39/264	14.8	12.9	8.6 – 16.2	19/88	21.6	20.2	10.4 – 29.1

## MSM Anuradhapura

Characteristic	< 25				≥ 25			
	Sample proportions		Population estimates		Sample proportions		Population estimates	
	n/N	%	%	95% CI	n/N	%	%	95% CI
HIV	0/159	0	0	-	0/197	0	0	-
Syphilis – Active	0/159	0	0	-	0/197	0	0	-
Syphilis – Non-Active	1/159	0.6	0.4	0 – 0.9	5/197	2.5	2.3	0.5 – 4.0
Syphilis (active and non-active)	1/159	0.6	0.4	0 – 0.9	5/197	2.5	2.3	0.5 – 4.0
Used a condom at last sex with a client	78/149	52.3	47.6	39.0 – 53.4	111/178	62.4	60.7	53.0 – 67.3
Tested in the last 12 months and knows result	14/159	8.8	7.5	3.6 – 10.6	21/197	10.7	9.6	5.2 – 13.3
Reached with HIV prevention programs (received free condoms and know where HIV testing can be obtained)	32/159	20.1	17.7	11.7 – 22.3	50/197	25.4	26.9	20.5 – 34.0
Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	84/159	52.8	48.9	39.9 – 55.6	116/195	59.5	56.2	48.1 – 62.3

**BB Galle**

Characteristic	< 25				≥ 25			
	Sample proportions		Population estimates		Sample proportions		Population estimates	
	n/N	%	%	95% CI	n/N	%	%	95% CI
HIV	0/161	0	0	-	0/145	0	0	-
Syphilis – Active	0/161	0	0	-	0/145	0	0	-
Syphilis – Non-Active	1/161	0.6	0.5	0 – 1.4	0/145	0	0	-
Syphilis (active and non-active)	1/161	0.6	0.5	0 – 1.4	0/145	0	0	-
Ever received money, goods or services in exchange for sex	50/159	31.4	30.3	22.2 – 38.0	48/145	33.1	30.1	21.5 – 37.5
Used a condom at last sex with a tourist	76/119	63.9	64.4	55.8 – 73.0	86/119	72.3	70.8	62.2 – 78.9
Tested in the last 12 months and knows result	3/161	1.9	1.9	0.09 – 3.8	8/145	5.5	6.7	0.1 – 13.9
Reached with HIV prevention programs (received free condoms and know where HIV testing can be obtained)	12/161	7.5	6.3	2.9 – 9.2	16/145	11.0	9.4	3.7 – 14.4
Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	33/161	20.5	17.5	11.7 – 22.0	35/145	24.1	22.8	16.1 – 29.2

## PWID Colombo

Characteristic	< 25				≥ 25			
	Sample proportions		Population estimates		Sample proportions		Population estimates	
	n/N	%	%	95% CI	n/N	%	%	95% CI
HIV	0/28	0	0	-	0/298	0	0	-
Syphilis – Active	0/28	0	0	-	0/298	0	0	-
Syphilis – Non-Active	0/28	0	0	-	1/298	0.3	0.3	0 – 0.8
Syphilis (active and non-active)	0/28	0	0	-	1/298	0.3	0.3	0 – 0.8
Used a condom at last sex	10/27	37.0	30.6	13.9 – 46.5	65/263	24.7	23.3	17.7 – 28.6
Shared needle or syringe at last day of injecting drugs	20/28	71.4	64.0	42.4 – 85.2	146/298	49.0	47.9	41.9 – 53.7
Tested in the last 12 months and knows result	0/28	0	0	-	27/298	9.1	9.6	6.3 – 13.0
Reached with HIV prevention programs (received free condoms and know where HIV testing can be obtained)	0/28	0	0	-	14/298	4.7	4.5	2.3 – 6.7
Both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	13/26	50.0	53.3	33.7 – 73.1	88/281	31.3	32.0	26.2 – 37.8

## Annex B – Informed Consent Form for IBBS Survey

### INFORMED CONSENT FORM for Integrated Biological and Behavioral Surveillance (IBBS) Survey

Interviewer: Answer the participant's questions about the survey before proceeding to the informed consent authorization.

#### INFORMED CONSENT AUTHORIZATION

Interviewer: Ask participant to document response to each question by checking the appropriate box.

Participants may consent or decline each part of the survey.

A. Do you agree to participate in part or all of the survey or do you decline participation?

- 1. YES, agree to participate in part or all of the survey. (Go to Question B)
- 2. NO, decline to participate. [if NO participant not eligible to participate].

If declined:

We're interested in knowing why people do not want to do this survey. Would you mind telling me which of the following best describes the reason you do not want to do this survey?

I don't have time

I don't want to talk about these topics

Some other reason; Specify \_\_\_\_\_

I would rather not say why

B. Do you agree or decline to complete the survey questionnaire?

- 1. YES, agree. (Go to Question C)
- 2. NO, decline. [if NO participant not eligible to participate].

C. Do you agree for us to draw a sample of blood as well as if required, to send for additional testing for confirmation?

- 1. YES, agree.
- 2. NO, decline.

D. Do you agree to rapid HIV testing to receive your results today?

- 1. YES, agree.
- 2. NO, decline.



I have explained to the participant the survey purpose and procedures and we have discussed all the risks involved. The participant has read this document or had the document read to them.

The participant has agreed to participate in the above procedures (as marked).

- I have informed the participant about the nature, conduct, benefits and risks of this survey
- I have informed the participant that the results of the survey including personal details regarding sex, age, HIV status will be anonymously processed into a survey report
- I have informed the participant that they may, at any stage during the interview, without prejudice, withdraw consent and participation in the survey
- The participant has been given the chance to ask any questions and I have answered to the best of my ability

Name of person obtaining consent \_\_\_\_\_

Signature of person obtaining consent \_\_\_\_\_

Date \_\_\_/\_\_\_/\_\_\_ Time \_\_\_/\_\_\_

Copy to:

- Participant
- Investigator's file



205.	What country were you born in? <b>if selected other</b>	1. Sri Lankan 2. Other (specify): 99. Decline to answer
206.	In which district have you mostly lived in the past one year?	1. Colombo 2. Kandy 3. Galle 4. Kalutara 5. Anuradhapura 88. Other (specify) 99. Decline to answer
207.	What language(s) do you speak most commonly at home?	1. Sinhalese 2. Tamil 3. English 4. Other (specify):
208.	What is the highest level of education you completed	1. Never attended school 2. Grade 1 - 5 3. Grade 6 - 10 4. Passed O/L 5. Passed A/L 6. Completed diploma 7. Completed degree 7. Other (specify): 99. Decline to answer
209.	Can you read and write?	1. Yes 2. No 3. Don't know 4. Decline to answer
210.	Are you currently a student or enrolled as a learner?	1. Yes 2. No 3. Don't know 4. Decline to answer

210a.	If yes, currently enrolled as a learner, with what type of institution are you enrolled?	1. University 2. Technical College 3. Vocational School 4. Other (specify):
211.	What is your ethnicity? <b>Do not read answers, record only one</b>	1. Sinhalese 2. Sri Lankan Tamil 3. Indian Tamil 4. Moor 5. Berger 6. Malay 7. Other (specify): 99. Decline to answer
212.	What is your monthly personal income?	1. Less than 5,000 Rupees 2. 5,000 - 10,000 3. 10,001 - 20,000 4. 20,001 - 30,000 5. 30,001 - 40,000 6. > 40,001 88. Don't know 99. Decline to answer
213.	Including yourself, how many people depend on this income? <b>Write 999 if decline to answer</b>	[ ] [ ] [ ] 999. Decline to answer
214.	How long have you lived in [place of interview/study district]? <b>In whole years, months written on next screen, if less than one year, write zero (00) on this screen, Write 888 if don't know, 999 if decline to answer</b>	[ ] [ ] [ ] (number of years) [ ] [ ] [ ] and (number of months) 888. Don't know 999. Decline to answer

215.	Is [insert study location / district] your primary residence?	1. Yes 2. No 88. Don't know 99. Decline to answer
216.	If your primary residence is not in (survey district) _____ where is your primary residence? ASK FOR CITY <b>Write 999 for decline to answer</b>	
217.	In the past 6 months, did you do any other type of work to receive money/income?	1. Yes 2. No 3. Don't know 4. Decline to answer
218.	What is the main occupation or activity through which you earned this other income? <b>Do not read answers, record only one</b>	1. Street vendor/casual labourer 2. Factory worker 3. Professional/banker/accountant 4. Teacher 5. Business owner 6. Hairdresser/beautician/masseuse 7. Waitress/bartender/hotel employee 8. Musician/dancer/performer 9. Tourism/travel agent/tour guide 10. Government worker 11. Security guard 12. Fisherman/seafarer 13. Farmer/agriculture worker 14. Taxi driver / Three wheeler driver 15. Other (specify): 99. Decline to answer

Section 3 Marriage and Family		
301.	What is your current marital status? <b>Do not read answers, record only one</b>	1. Single (never married) 2. Living together, but not married 3. Married 4. Divorced / Separated 5. Widowed 99. Decline to answer
302.	Who do you currently live with? <b>Do not read answers, record all mentioned</b>	1. Husband / Wife 2. Other sexual partner 3. Parents 4. Siblings 5. Children 6. Other family/relatives 7. Friend or roommate (not sexual partner) 8. Live alone 9. Co-workers 10. Other (specify): 99. Decline to answer
303.	How would you describe where you live? <b>Record only one</b>	1. Temporary shelter 2. Boarding house 3. Parents home 4. My home 5. Lodging 6. On the street 7. Brothel 8. Other (specify) 99. Decline to answer

304.	How many children have you given birth to, in your life? <b>Write 999 for decline to answer</b>	[ ] [ ] [ ] 999. Decline to answer
<b>Section 4 Sexual History</b>		
<b>INTERVIEWER SAY: I will now ask you some information about your sexual history, please remember all information is confidential.</b>		
401.	At what age did you first have vaginal sex? <b>Write 888 if don't know, 999 if decline to answer</b>	[ ] [ ] [ ] (Age in years) 888. Don't know 999. Decline to answer
402.	At what age did you first have anal sex? <b>If never had anal sex write 777, if don't know write 888, if decline to answer write 999</b>	[ ] [ ] [ ] (Age in years) 777. Never had anal sex 888. Don't know 999. Decline to answer
403.	What was the age of the person with whom you first had sex (vaginal or anal, whichever came first)? <b>Write 888 if don't know, 999 if decline to answer</b>	[ ] [ ] [ ] (Age in years) 888. Don't know 999. Decline to answer
404.	In the last 7 days how many TOTAL SEXUAL PARTNERS did you have? We mean all partners, any type of sex (vaginal or anal). If you cannot remember the exact number, please give me an estimate. <b>Write 888 if don't know, 999 if decline to answer</b>	1. [ ] [ ] [ ] [ ] [ ] [ ] 888. Don't know 999. Decline to answer

405.	Of all these sexual partners in the last 7 days, how many of them were paying partners (e.g. clients)? <b>If don't know write 888, if declined to answer 999</b>	1. [ ] [ ] [ ] [ ] [ ] [ ] 888. Don't know 999. Decline to answer
406.	Of all these sexual partners in the last 7 days, how many were non-paying (regular) partners? <b>Check now that Q404= the total of Q405 and Q406, if incorrect, go back and ask again/If don't know write 888, if declined to answer 999</b>	1. [ ] [ ] [ ] [ ] [ ] [ ] 888. Don't know 999. Decline to answer
<b>INTERVIEWER SAY: Now I am going to ask you the same set of questions, but over the last 30 days instead.</b>		
407.	In the last 30 days how many TOTAL SEXUAL PARTNERS did you have? We mean all partners, any type of sex (vaginal or anal). If you cannot remember the exact number, please give me an estimate.   <i>If don't know write 888, if declined to answer 999</i> <b>If they answer 0, check when last time they had sex, if more than 6 months, not eligible to participate, stop interview, get the FTL</b>	1. [ ] [ ] [ ] [ ] [ ] [ ] 888. Don't know 999. Decline to answer
407b.	Why have you not had sex in the last 30 days	1. Have not found any clients 2. Other (specify): 3. Refuse to answer

408.	Of all these sexual partners in the last 30 days, how many of them were paying partners (e.g. clients)? <b>If don't know write 888, if declined to answer 999</b>	1. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] 888. Don't know 999. Decline to answer
409.	Of these sexual partners in the last 30 days, how many were non-paying (regular) partners? <b>If don't know write 888, if declined to answer 999</b>	1. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] 888. Don't know 999. Decline to answer
<b>INTERVIEWER SAY: Now I am going to ask you some questions about paying partners (e.g. clients).</b>		
410.	At what age did you first receive money for sex? <b>If don't know write 888, if declined to answer 999</b>	[ ] [ ] [ ] (Age in years) 888. Don't know 999. Decline to answer

411.	What were the reasons that led you to exchange sex for money the first time? <b>Do not read answers, record all mentioned</b>	<p>1. I needed money</p> <p>2. I didn't have any other job</p> <p>3. I grew up around people who did sex work</p> <p>4. I was forced/pressured into it</p> <p>5. I like it/for pleasure</p> <p>6. I was encouraged by friends/people I know</p> <p>7. It pays well/you can make a lot of money</p> <p>8. I was abandoned by my parents/siblings</p> <p>9. I was abandoned by my husband</p> <p>10. So that I can have extra money to buy material things I want</p> <p>11. Because I am an orphan/I don't have a mother or father</p> <p>12. Other (specify):</p> <p>88. Don't know</p> <p>99. Decline to answer</p>
412.	Of all paying partners / clients, in the last 30 days, how often did you use a condom during sex (vaginal or anal)?	<p>1. Always</p> <p>2. Usually</p> <p>3. Sometimes</p> <p>4. Rarely</p> <p>88. Don't know</p> <p>99. Decline to answer</p>

413.	Of all paying partners / clients in the last 12 months, with how many have you only had sex with one time?	1. Most clients I only have sex with one time (e.g. I don't have many repeat customers) 2. Most clients I have sex with more than one time (e.g. clients come back more than once) 3. I Don't know 888. Don't know 999. Decline to answer	1. Most clients I only have sex with one time (e.g. I don't have many repeat customers) 2. Most clients I have sex with more than one time (e.g. clients come back more than once) 3. I Don't know 888. Don't know 999. Decline to answer
414.	On the last day you worked, how many clients did you have? <b>Write 888 if don't know, 999 if decline to answer</b>	[ ] [ ] [ ] [ ] [ ] [ ] (Number of paying clients) 888. Don't know 999. Decline to answer	[ ] [ ] [ ] [ ] [ ] [ ] (Sri Lankan Rupees) 888. Don't know 999. Decline to answer
415.	How much money (Sri Lankan rupees) do you typically receive when you exchange for sex? <b>Write 888 if don't know, 999 if decline to answer</b>	[ ] [ ] [ ] [ ] [ ] [ ] (Sri Lankan Rupees) 888. Don't know 999. Decline to answer	[ ] [ ] [ ] [ ] [ ] [ ] (Sri Lankan Rupees) 888. Don't know 999. Decline to answer
416.	The last time you received that amount, what service(s) did you provide? <b>Read answers, record all mentioned</b>	1. Oral sex 2. Vaginal sex 3. Anal sex 4. Short term (hours or less) companionship 5. Long term (i.e.: night/weekend) companionship 88. Don't know 99. Decline to answer	1. Oral sex 2. Vaginal sex 3. Anal sex 4. Short term (hours or less) companionship 5. Long term (i.e.: night/weekend) companionship 88. Don't know 99. Decline to answer

417.	The last time you received that amount, what service(s) did you provide? <b>Read answers, record all mentioned</b>	1. Pimp/Tout 2. Owner of the business (e.g. brothel) 3. I decide 4. the client decides 88. Don't know 99. Decline to answer	1. Pimp/Tout 2. Owner of the business (e.g. brothel) 3. I decide 4. the client decides 88. Don't know 99. Decline to answer
418.	Where do you normally go to find clients? <b>Do not read answers, record all mentioned</b>	1. Brothel 2. Bar, café, disco, or restaurant 3. Hotel 4. Street, park or public transport 5. Through friends 6. Internet (e.g. Facebook), chat, or SMS 7. Motel or Guest House 8. School 9. Party 10. Service station 11. Through an intermediary (pimp, bartender, taxi driver) 12. Truck stop 13. Spa / Salon / Massage Parlour 14. Other (specify): 88. Don't know	1. Brothel 2. Bar, café, disco, or restaurant 3. Hotel 4. Street, park or public transport 5. Through friends 6. Internet (e.g. Facebook), chat, or SMS 7. Motel or Guest House 8. School 9. Party 10. Service station 11. Through an intermediary (pimp, bartender, taxi driver) 12. Truck stop 13. Spa / Salon / Massage Parlour 14. Other (specify): 88. Don't know
419.	Where do you normally go to have sex with clients? <b>Do not read answers, check all that apply</b>	1. Brothel 2. Hotel / Guest House 3. Massage Parlour 4. My home 5. Client's home 6. Car 7. Park 777. Other (specify): 88. Don't know 99. Decline to answer	1. Brothel 2. Hotel / Guest House 3. Massage Parlour 4. My home 5. Client's home 6. Car 7. Park 777. Other (specify): 88. Don't know 99. Decline to answer

420.	What are the names of the three venues you go most frequently to find clients?	Venue 1 Venue 2 Venue 3 88. Don't know 99. Decline to answer
421.	The last time you had sex with a client, did you use a condom?	1. Yes 2. No 88. Don't know 99. Decline to answer
422.	Who suggested that a condom be used?	1. I did 2. He did 88. Don't know 99. Decline to answer
423.	Can you tell me the reasons why you used a condom? <b>Do not read answers, record all mentioned</b>	1. To prevent HIV/STIs 2. Do not trust partner 3. Messages advising the use of condoms 4. To prevent pregnancy 5. Other (specify): 88. Don't know 99. Decline to answer

424.	Can you tell me the reasons why you did not use a condom? <b>Do not read answers, record all mentioned</b>	1. Never heard of condoms 2. Don't know how to obtain a condom 3. I didn't think it was necessary 4. I didn't think of it 5. Not available 6. Too expensive 7. Partner objected 8. Don't like them 9. Used other contraceptive 10. Used other prevention methods 11. Partner was a faithful client 12. Partner was a regular client 13. Condoms take away pleasure 14. Other (specify): 88. Don't know 99. Decline to answer
425.	Have you ever had sexual intercourse with a client without condom because the client paid extra money so that the condom would not be used?	1. Yes 2. No 88. Don't know 99. Decline to answer
426.	What was the nationality of your last paying partner?	1 Sri Lankan 4. Other (specify): 88. Don't know 99. Decline to answer



427.	With your last paying sexual partner (e.g. client), what did you know or believe his HIV status to be?	1. HIV-negative 2. HIV-positive 88. Don't know 99. Decline to answer
<b>Non-paying partners</b>		
428.	Of all non-paying (regular) partners, in the 30 days, how often did you use a condom during sex (vaginal or anal)?	1. Every time 2. Almost every time 3. Sometimes 4. Never 5. I did not have a non paying partner in the last 30 days 88. Don't know 99. Decline to answer
429.	The last time you had sex with a non paying partner, did you use a condom?	1. Yes 2. No Never had a non paying partner in my life 88. Don't know 99. Decline to answer
430.	Who suggested that a condom be used? <b>For last non paying partner</b>	1. I did 2. He did 88. Don't know 99. Decline to answer 1. I did 2. He did 88. Don't know 99. Decline to answer

431.	Can you tell me the reasons why you used a condom? <b>(For last non paying partner) Do not read answers, record all mentioned</b>	1. To prevent HIV/STIs 2. Do not trust partner 3. Messages advising the use of condoms 4. To prevent pregnancy 5. Other (specify): 88. Don't know 99. Decline to answer
432.	Can you tell me the reasons why you did not use a condom? <b>Do not read answers, record all mentioned</b>	1. Never heard of condoms 2. Don't know how to obtain a condom 3. I didn't think it was necessary 4. I didn't think of it 5. Not available 6. Too expensive 7. Partner objected 8. Don't like them 9. Used other contraceptive 10. Used other prevention methods 11. Partner was a faithful client 12. Partner was a regular client 13. Condoms take away pleasure 14. Other (specify): 88. Don't know 99. Decline to answer

Section 5: Condom Awareness and Usage	
INTERVIEWER SAY: For the next several questions I will ask about	
501.	Before today, had you ever heard of a condom? I mean a rubber object that is put on a man's penis before sex. 1. Yes 2. No 88. Don't know 99. Decline to answer
502.	Have you ever used a male condom during sex with any partner? 1. Yes 2. No 88. Don't know 99. Decline to answer
503.	Do you know any place or person from which you can obtain male condoms? 1. Yes 2. No 88. Don't know 99. Decline to answer
504.	Where can you obtain male condoms? <b>Do not read answers, record all mentioned</b> 1. Government clinic - STD clinic 2. Government clinic - Not STD clinic 3. Private clinic 4. Private pharmacy or chemist 5. Traditional healer/herbalist 6. Neighbourhood market/stand 7. Friends 8. Sex partner/s 9. Bar 10. Service station(s) 11. Other (specify): 88. Don't know 99. Decline to answer

505.	Do you usually carry condoms with you? 1. Yes 2. No 88. Don't know 99. Decline to answer
506.	In the last twelve months, have you been given condoms? (e.g. through an outreach service, drop-in centre or sexual health clinic)? 1. Yes 2. No 88. Don't know 99. Decline to answer
507.	Usually with clients, who supplies the condoms? 1. I never use a condom 2. Myself 3. Client 4. Owner / Manager of the place 88. Don't know 99. Decline to answer
508.	How affordable do you find male condoms to be? <b>Read answers, record only one</b> 1. Affordable 2. Somewhat affordable 3. Not affordable 88. Don't know 99. Decline to answer
509.	How easy do is it to obtain male condoms? <b>Read answers, record only one</b> 1. Very easy 2. Somewhat easy 3. Not easy 88. Don't know 99. Decline to answer

510.	Where do you usually get male condoms?	<ol style="list-style-type: none"> <li>1. Government clinic - STD clinic</li> <li>2. Government clinic - Not STD clinic</li> <li>3. Private clinic</li> <li>4. Private pharmacy or chemist</li> <li>5. Traditional healer/herbalist</li> <li>6. Neighbourhood market/stand</li> <li>7. Friends</li> <li>8. Sex partner/s</li> <li>9. Bar /Nightclub</li> <li>10. Service station(s)</li> <li>11. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
511.	Have you ever heard of a female condom? <b>Show female condom</b>	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
512.	Have you ever used a female condom?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
513.	Would you consider using a female condom in the future?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

Section 6: Lubricant access and use	
INTERVIEWER SAY: Now, I am going to ask you some questions about lubricant access and your use of lubricant.	
601.	Have you ever heard of lubricant?  1. Yes 2. No 88. Don't know 99. Decline to answer
602.	How often do you use lubricant during vaginal or anal sex?  1. Always 2. Usually 3. Sometimes 4. Rarely 5. Never 88. Don't know 99. Decline to answer
603.	What type of lubricant do you usually use? <b>Do not read answers, record all mentioned</b>  1. Glycerine 2. Saliva or water 3. Vaseline 4. Baby oil 5. Lotion 6. Other oil 7. Water-based 8. Silicone-based 9. Soap 10. Whatever we get from peer educator(s), don't know what it is 11. Other (specify): 88. Don't know 99. Decline to answer
604.	Would you consider using lubricant in the future?  1. Yes 2. No 88. Don't know 99. Decline to answer

Section 7: Sexually Transmitted Infections (STIs)	
INTERVIEWER SAY: Now I am going to ask you some questions about sexually transmitted infections, also known as STIs or STDs. For these questions, we are asking about STIs other than HIV. Please answer to the best of your ability.	
701.	<p>Before today, had ever heard of diseases that can be transmitted sexually?</p> <p>1. Yes 2. No 88. Don't know 99. Decline to answer</p>
702.	<p>Can you describe symptoms of sexually transmitted infections in women? <b>Do not read answers, record all mentioned</b></p> <p>1. Abdominal pain 2. Genital discharge 3. Foul smelling discharge 4. Burning pain on urination 5. Genital ulcers or sores 6. Swelling in groin area 7. Itching 8. . Other (specify): 88. Don't know 99. Decline to answer</p>
703.	<p>Can you describe symptoms of sexually transmitted infections in men? <b>Do not read answers, record all mentioned</b></p> <p>1. Abdominal pain 2. Genital discharge 3. Foul smelling discharge 4. Burning pain on urination 5. Genital ulcers or sores 6. Swelling in groin area 7. Itching 8. Other (specify): 88. Don't know 99. Decline to answer</p>
704.	<p>In the last 12 months, has a doctor or a medical professional told you that you had a sexually transmitted infection?</p> <p>1. Yes 2. No 88. Don't know 99. Decline to answer</p>

705.	Have you had discharge from your penis or anus in the last 12 months?	1. Yes 2. No 88. Don't know 99. Decline to answer
706.	When did you have your last have discharge? <b>Enter JAN.1900 if don't know, enter FEB.1900 if declined to answer</b>	[ ] [ ] / [ ] [ ] [ ] [ ] [ ] [ ] (month /year)
707.	Did you seek treatment for this discharge?	1. Yes 2. No 88. Don't know 99. Decline to answer
708.	Why did you NOT seek treatment?	1. Didn't know where to go for treatment 2. Embarrassed or afraid to seek treatment 3. Could not afford treatment 4. Unable to get transportation 5. Didn't think I needed it 6. Other (specify): 88. Don't know 99. Decline to answer
709.	Have you had a sore or ulcer in the last 12 months?	1. Yes 2. No 88. Don't know 99. Decline to answer
710.	When did you last have a sore or ulcer? <b>Enter JAN.1900 if don't know, enter FEB.1900 if declined to answer</b>	[ ] [ ] [ ] / [ ] [ ] [ ] [ ] [ ] [ ] (month /year) 888. Don't know 999. Decline to answer

711.	Did you seek treatment for this sore or ulcer?	<ul style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
712.	Why did you NOT seek treatment? <b>Do not read answers, record all mentioned</b>	<ul style="list-style-type: none"> <li>1. Didn't know where to go for treatment</li> <li>2. Embarrassed or afraid to seek treatment</li> <li>3. Could not afford treatment</li> <li>4. Unable to get transportation</li> <li>5. Didn't think I needed it</li> <li>6. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
713.	Where did you seek treatment the last time you had discharge, a sore or ulcer? <b>Do not read answers, record all mentioned</b>	<ul style="list-style-type: none"> <li>1. Government clinic - STD clinic</li> <li>2. Government clinic - Not STD clinic</li> <li>2. Private clinic</li> <li>3. Private pharmacy or chemist</li> <li>4. Traditional healer/herbalist</li> <li>5. Medicine or herbs from home</li> <li>6. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>

714.	Why did you choose to get treatment from this source/these sources? <b>Do not read answers, record all mentioned</b>	<ul style="list-style-type: none"> <li>1. Confidentiality</li> <li>2. Affordability</li> <li>3. Recommended by friend or acquaintance</li> <li>4. Quality and/or specialized care given at this place</li> <li>5. Knows the caregivers</li> <li>6. Known friendliness of the caregivers</li> <li>7. Proximity/location</li> <li>8. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
715.	The last time you received treatment for any symptom of an STI or had a diagnosis for an STI, did you tell the health care provider that you have sex with men?	<ul style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
716.	Overall, how satisfied were you with how the health care provider treated you during this last visit? <b>READ ANSWERS, RECORD ONLY ONE</b>	<ul style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Somewhat satisfied</li> <li>3. Not satisfied</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
717.	Is it possible to have an STI without there being a symptom?	<ul style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>

<b>Section 8: HIV/AIDS knowledge, HIV prevention and testing and counselling</b>	
<b>INTERVIEWER SAY: Now, I am going to ask you some questions about HIV and AIDS.</b>	
801.	<p>Before today, had you ever heard of HIV or the disease called AIDS?</p> <p>1. Yes 2. No 88. Don't know 99. Decline to answer</p>
802.	<p>From which one source of information have you acquired the most thorough understanding of HIV and AIDS?</p> <p>1. School 2. Health services 3. workplace 4. Friends/family 5. Television 6. Newspaper / magazines 7. Posters / billboards 8. Pamphlet. Leaflets 9. Radio 10. NGOs 11. Other (specify): 88. Don't know 99. Decline to answer</p>
803.	<p>Have you ever discussed HIV or AIDS with any sexual partners?</p> <p>1. Yes, all 2. Yes, some 3. No, none 88. Don't know 99. Decline to answer</p>
804.	<p>Have any of those partners ever told you their HIV status?</p> <p>1. Yes, all 2. Yes, some 3. No, none 88. Don't know 99. Decline to answer</p>

805.	<p>Do you know anyone who is infected with HIV or who has died of AIDS?</p> <p>1. Yes 2. No 88. Don't know 99. Decline to answer</p>
806.	<p>Do you have a close friend or relative who has died of HIV/AIDS?</p> <p>1. Yes, close relative 2. Yes, close friend 3. No 88. Don't know 99. Decline to answer</p>
807.	<p>How likely do you think it is that you yourself will contract HIV / AIDS? Would you say there is no risk, a small risk, moderate risk, or high risk?</p> <p>1. No risk 2. Small risk 3. Moderate risk 4. High risk 88. Don't know 99. Decline to answer</p>
808.	<p>Why do you think you are at risk of contracting HIV?</p> <p>1. Have had many partners 2. Do not always use condoms 3. Have injected drugs 4. Partner has other partners 5. Other (specify): 88. Don't know 99. Decline to answer</p>
809.	<p>Why do you think you are at no or low risk of contracting HIV? <b>multiple answers possible</b></p> <p>1. Trust my partner (s) 2. Always use condoms 3. Other (specify) 88. Don't know 99. Decline to answer</p>







1007.	Did you get the result of this last HIV test?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1008.	For what reason(s) did you get this last test?	<ol style="list-style-type: none"> <li>1. Wanted to know my HIV status</li> <li>2. My partner asked me to get tested</li> <li>3. Wanted to start sexual relations with a new partner</li> <li>4. Wanted to get married</li> <li>5. Need for loan/insurance coverage</li> <li>6. Employer requested the test</li> <li>7. I felt sick</li> <li>8. Advised by a health worker</li> <li>9. Advised by a peer educator</li> <li>10. Pregnant</li> <li>11. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1009.	What was the result of your last HIV test? If you do not feel comfortable, you do not need to answer this question.	<ol style="list-style-type: none"> <li>1. HIV-negative</li> <li>2. HIV-positive</li> <li>3. Indeterminate</li> <li>4. I didn't get the result</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1010.	If you didn't get your result, why not?	<ol style="list-style-type: none"> <li>1. I didn't have time/too busy</li> <li>2. I am not infected</li> <li>3. I was too scared</li> <li>4. The testing center didn't have my result</li> <li>5. Other (specify):</li> <li>6. I did get the result</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

1011.	When was your first HIV-positive test? <b>Enter JAN.1900 if don't know, enter FEB.1900 if declined to answer</b>	[ ]/[ ] / [ ]/[ ]/[ ]/[ ] (month /year)
1012.	When was your last HIV-negative test? <b>Enter JAN.1900 if don't know, enter FEB.1900 if declined to answer</b>	[ ]/[ ] / [ ]/[ ]/[ ]/[ ] (month /year)
1013.	What do you think your HIV status is today?	<ol style="list-style-type: none"> <li>1. HIV-negative</li> <li>2. HIV-positive</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1014.	How satisfied were you with the quality of services provided at the place where you got the last test? <b>Read answers, record only one</b>	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. A little satisfied</li> <li>4. Not satisfied</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1015.	At any time during your most recent counselling and testing experience, did you reveal to the counsellor or health care provider that you have sex with men?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

1016.	Why did you NOT tell the counsellor or health care provider that you exchange sex for money? <b>Do not read answers, record all mentioned</b>	1. Afraid provider would discriminate/ not provide testing 2. Afraid provider would tell police/legal authorities 3. Did not feel it was necessary to discuss 4. Afraid provider would not keep my information confidential 5. Little or no contact/interaction with counsellor or provider 6. Shy/embarrassed 7. Provider already knew 8. Other (specify): 88. Don't know 99. Decline to answer	1. Afraid provider would discriminate/ not provide testing 2. Afraid provider would tell police/legal authorities 3. Did not feel it was necessary to discuss 4. Afraid provider would not keep my information confidential 5. Little or no contact/interaction with counsellor or provider 6. Shy/embarrassed 7. Provider already knew 8. Other (specify): 88. Don't know 99. Decline to answer
1017.	Did you feel that the counsellor or health care provider reacted to you in a negative or discriminatory way because you exchange sex for money?	1. Yes 2. No 88. Don't know 99. Decline to answer	1. Yes 2. No 88. Don't know 99. Decline to answer
1018.	What did the counsellor do to make you feel that way? <b>Do not read answers, record all mentioned</b>	1. Was very uncomfortable discussing 2. Stopped talking to me 3. Asked me to leave 4. Verbally abused or scolded me 5. Other (specify): 88. Don't know 99. Decline to answer	1. Was very uncomfortable discussing 2. Stopped talking to me 3. Asked me to leave 4. Verbally abused or scolded me 5. Other (specify): 88. Don't know 99. Decline to answer
1019.	If someone in your community has a sexually transmitted infection, where can they get a confidential advice and treatment? <b>Do not read answers, record all mentioned</b>	1. Ayurvedic physician 2. Pharmacy 3. Private clinic 4. Government clinic - STD clinic 5. Other Government clinic/hospital 88. Don't know 99. Decline to answer	1. Ayurvedic physician 2. Pharmacy 3. Private clinic 4. Government clinic - STD clinic 5. Other Government clinic/hospital 88. Don't know 99. Decline to answer

<b>Section 11: Stigma, discrimination and violence</b>			
<b>INTERVIEWER SAY: Now I will ask you some questions about discrimination and violence. While some people may have experienced these, others may not. Please remember your answers will be kept private.</b>			
1101.	In the past 12 months, have you been refused health care because someone believed you sell sex to men?	1. Yes 2. No 88. Don't know 99. Decline to answer	1. Yes 2. No 88. Don't know 99. Decline to answer
1102.	In the past 12 months, have you been refused police assistance because someone believed you sell sex to men?	1. Yes 2. No 88. Don't know 99. Decline to answer	1. Yes 2. No 88. Don't know 99. Decline to answer
1103.	In the past 12 months, have you had verbal insults directed at you because someone believed you sell sex to men?	1. Yes 2. No 88. Don't know 99. Decline to answer	1. Yes 2. No 88. Don't know 99. Decline to answer
1104.	In the past 12 months, have you been hit, kicked, or beaten because someone believed you sell sex to men?	1. Yes 2. No 88. Don't know 99. Decline to answer	1. Yes 2. No 88. Don't know 99. Decline to answer
1105.	In the past 12 months, did anyone force you to have sex with them by sexually assaulting or raping you?	1. Yes 2. No 88. Don't know 99. Decline to answer	1. Yes 2. No 88. Don't know 99. Decline to answer

1106.	Who was the person who last forced you to have sex with them? <b>Do not record answers, record only one</b>	<ol style="list-style-type: none"> <li>1. Do not know the person</li> <li>2. Social acquaintance</li> <li>3. Family/relative</li> <li>4. Police</li> <li>5. Client</li> <li>6. Other sex worker</li> <li>7. Pimp</li> <li>8. Non-paying partner or boyfriend</li> <li>9. Other (specify)</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1107.	Did you seek medical treatment after this happened?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1108.	Did you report this incident to the police?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
<b>Section 12: Healthcare utilization</b>		
<b>INTERVIEWER SAY: Now I am going to ask you some questions about your experience with the health care system.</b>		
1201.	During the last 12 months have you sought medical care for any reason?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1202.	In the past 12 months, have you had difficulty getting medical care when you sought it?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

1203.	What difficulty did you have?	<ol style="list-style-type: none"> <li>1. Too expensive</li> <li>2. Too far away</li> <li>3. Could not take time from work</li> <li>4. Long waiting times</li> <li>5. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1204.	Are you currently pregnant?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1205.	Have you had any births in the past 5 years?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1206.	Did you visit an ANC for your prenatal care during your most recent pregnancy?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1207.	Was this visit to the ANC during the last 12 months?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1208.	Were you offered an HIV test at the ANC or maternity during your most recent pregnancy?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

1209.	What was your HIV status during your most recent pregnancy?	1. HIV-negative 2. HIV-positive 3. Indeterminate 4. I didn't get the result 88. Don't know 99. Decline to answer
1210.	Did you receive a course of treatment that can prevent your baby from infection?	1. Yes 2. No 88. Don't know 99. Decline to answer
1211.	Did your baby receive a dose/course of treatment to prevent infection?	1. Yes 2. No 88. Don't know 99. Decline to answer
<b>Section 13: Program coverage</b>		
<b>INTERVIEWER SAY: Now I am going to ask you some questions about your experience with social programs.</b>		
1301.	In the last 6 months, have you been in contact with a health peer educator in the community?	1. Yes 2. No 88. Don't know 99. Decline to answer
1302.	In the last 6 months, how many times have you been in contact with the peer educator? <b>If don't know 888, 999 if declined to answer</b>	[ ] [ ] [ ] (number of times) 888. Don't know 999. Decline to answer

1303.	What services or information did you receive from the peer educator? <b>Do not read answers, record all mentioned</b>	1. General HIV/STI prevention/transmission information 2. Condoms 3. Referral for STI treatment 4. Referral for VCT 5. Medical visit 6. Other (specify): 88. Don't know 99. Decline to answer
<b>Section 14: Alcohol and Drug use</b>		
<b>INTERVIEWER SAY: Now, I would like to ask some questions about your alcohol and drug use.</b>		
1401.	Have you ever had a drink containing alcohol?	1. Yes 2. No 88. Don't know 99. Decline to answer
1402.	During the past 4 weeks, how often have you had a drink containing alcohol? <b>Do not read answers, record all mentioned</b>	1. I never drink alcohol 2. At least once a week 3. Less than once a week 4. Never in the last 4 weeks 5. Every day 88. Don't know 99. Decline to answer

<b>INTERVIEWER SAY: Some people have tried a range of different types of drugs. How often have you used the following drugs in the past 12 months?</b>	
1403. HAVE RESPONDENT ANSWER FOR EACH SEPARATELY	1. Heroin 2. Cannabis 3. Cocaine 4. Ecstasy 5. Amphetamines 6. Opium 7. Hashish 8. Other drugs? How often? 1. Yes 2. No 88. Don't know 99. Decline to answer
1404. Some people have tried injecting drugs using a syringe or needle. In the past 12 months, have you injected drugs?	1. Yes 2. No 88. Don't know 99. Decline to answer
1405. In the last 12 months, how frequently did you inject drugs?	1. Monthly or less 2. Two to four times a month 3. Two to three times a week 4. Four or more times a week 88. Don't know 99. Decline to answer
1406. What drug do you normally inject?	1. Heroin 2. Meth 3. Speedball (heroin plus cocaine) 4. Other (specify): 88. Don't know 99. Decline to answer
1407. How long after you started taking drugs did you start injecting? (write number and the word months or years?) Write 888 if don't know, 999 if decline to answer	[ ] [ ] / [ ] [ ] [ ] [ ] (month /year) 88. Don't know 99. Decline to answer

1408. In the last 6 months, have you shared a syringe or needle with anyone else when injecting drugs?	1. Yes 2. No 88. Don't know 99. Decline to answer
<b>Section 15: Programme Planning</b>	
<b>INTERVIEWER SAY: Just a couple more questions! Now I am going to ask you some questions related to planning programmes and interventions for female sex workers.</b>	
1501. How often in the past month did you listen to the radio	1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer
1502. Which radio stations do you mostly listen to? <b>Write 888 if don't know, 999 if decline to answer</b>	1. _____ 888. Don't know 999. Decline to answer
1503. How often in the past month did you watch TV?	1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer

1504.	Which TV stations do you mostly watch? <b>Write 888 if don't know, 999 if decline to answer</b>	1. _____ 888. Don't know 999. Decline to answer
1505.	How often in the past month did you read the newspaper?	1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer
1506.	Which newspapers do you mostly read?	1. _____ 888. Don't know 999. Decline to answer
1507.	How often did you surf the internet in the past month?	1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer
1508.	Which sites do you mostly visit?	1. _____ 888. Don't know 999. Decline to answer
1509.	Do you have a mobile phone?	1. Yes 2. No 88. Don't know 99. Decline to answer

1510.	Do you use this mobile phone to communicate with clients or other FSW?	1. Yes 2. No 88. Don't know 99. Decline to answer
1511.	Would you be interested in receiving text messages on your mobile phone, with health and HIV related information?	1. Yes 2. No 88. Don't know 99. Decline to answer
1512.	Would you attend group learning activities if they were offered?	1. Yes 2. No 88. Don't know 99. Decline to answer
RE-ENTER THE PARTICIPANT'S COUPON NUMBER		Coupon Code _____
RE-ENTER THE PARTICIPANT'S RDS NUMBER		RDS _____
<b>INTERVIEWER SAY: That is the end. Thank you so much for your time. I will take you now to the nurse.</b>		



205.	What country were you born in? <b>if selected other</b>	1. Sri Lankan 2. Other (specify): 99. Decline to answer
206.	In which district have you mostly lived in the past one year?	1. Colombo 2. Kandy 3. Galle 4. Kalutara 5. Anuradhapura 88. Other (specify) 99. Decline to answer
207.	What language(s) do you speak most commonly at home?	1. Sinhalese 2. Tamil 3. English 4. Other (specify):
208.	What is the highest level of education you completed	1. Never attended school 2. Grade 1 - 5 3. Grade 6 - 10 4. Passed O/L 5. Passed A/L 6. Completed diploma 7. Completed degree 7. Other (specify): 99. Decline to answer
209.	Can you read and write?	1. Yes 2. No 88. Don't know 99. Decline to answer
210.	Are you currently a student or enrolled as a learner?	1. Yes 2. No 88. Don't know 99. Decline to answer

210a.	If yes, currently enrolled as a learner, with what type of institution are you enrolled?	1. University 2. Technical College 3. Vocational School 4. Other (specify):
211.	What is your ethnicity? <b>Do not read answers, record only one</b>	1. Sinhalese 2. Sri Lankan Tamil 3. Indian Tamil 4. Moor 5. Berger 6. Malay 7. Other (specify): 99. Decline to answer
212.	What is your monthly personal income?	1. Less than 5,000 Rupees 2. 5,000 - 10,000 3. 10,001 - 20,000 4. 20,001 - 30,000 5. 30,001 - 40,000 6. > 40,001 88. Don't know 99. Decline to answer
213.	Including yourself, how many people depend on this income? <b>Write 999 if decline to answer</b>	[ ] [ ] [ ] 999. Decline to answer
214a.	How many years have you lived in [place of interview/study district]? <b>In whole years, months written on next screen, if less than one year, write zero (00) on this screen, Write 888 if don't know, 999 if decline to answer</b>	[ ] [ ] [ ] (number of years) [ ] [ ] [ ] and (number of months) 888. Don't know 999. Decline to answer



215.	Is [insert study location / district] your primary residence?	1. Yes 2. No 88. Don't know 99. Decline to answer
216.	If your primary residence is not in (survey district) _____ where is your primary residence? ASK FOR CITY <b>Write 999 for decline to answer</b>	
217.	What is your occupation? <b>Do not read answers, record only one</b>	1. Street vendor/casual labourer 2. Factory worker 3. Professional/banker/accountant 4. Teacher 5. Business owner 6. Hairdresser/beautician/masseuse 7. Waitress/bartender/hotel employee 8. Musician/dancer/performer 9. Tourism/travel agent/tour guide 10. Government worker 11. Security guard 12. Fisherman/seafarer 13. Farmer/agriculture worker 14. Taxi driver / Three wheeler driver 15. Other (specify): 99. Decline to answer
<b>Section 3 Marriage and Family</b>		
301.	What is your current marital status? <b>Do not read answers, record only one</b>	1. Single (never married) 2. Living together, but not married 3. Married 4. Divorced / Separated 5. Widowed 99. Decline to answer

302.	Who do you currently live with? <b>Do not read answers, record all mentioned</b>	1. Husband / Wife 2. Other sexual partner 3. Parents 4. Siblings 5. Children 6. Other family/relatives 7. Friend or roommate (not sexual partner) 8. Live alone 9. Co-workers 10. Other (specify): 88. Don't know 99. Decline to answer
303.	How would you describe where you live? <b>Record only one</b>	1. Temporary shelter 2. Boarding house 3. Parents home 4. My home 5. Lodging 6. On the street 7. Brothel 8. Other (specify) 99. Decline to answer
304.	How many children do you have?	[ ] [ ] [ ] 999. Decline to answer
305.	To which group do you belong? <b>Record only one</b>	1. Naachi 2. Male sex worker 3. Other MSM 99. Refuse to Answer

Section 4 Sexual History	
INTERVIEWER SAY: I will now ask you some information about your sexual history, please remember all information is confidential.	
401.	Have you ever had sex with a woman (vaginal or anal sex)? <b>If declined to answer write 999</b>
	1. Yes 2. No 999. Decline to answer
402.	Have you ever had anal sex with a man? <b>If declined to answer write 999</b>
	1. Yes 2. No 999. Decline to answer
403.	At what age did you first have anal sex with a man? <b>If declined to answer write 999</b>
	[ ] [ ] [ ] (Age in years) 999. Decline to answer
404.	How old was this partner, with whom you first had anal sex? <b>If declined to answer write 999</b>
	[ ] [ ] [ ] (Age in years) 999. Decline to answer
405.	In the last 7 days how many TOTAL SEXUAL PARTNERS did you have? We mean all partners, any type of sex (vaginal or anal). If you cannot remember the exact number, please give me an estimate.
	1. [ ] [ ] [ ] [ ] [ ] [ ] [ ]
406.	Of all these sexual partners in the last 7 days, how many of them were casual partners (only one time)?
	1. [ ] [ ] [ ] [ ] [ ] [ ] [ ]
407.	Of all these sexual partners in the last 7 days, how many of them were regular partners (more than one time)? <b>SENSE CHECK: Q405 SHOULD EQUAL Q406+407</b>
	1. [ ] [ ] [ ] [ ] [ ] [ ] [ ]

INTERVIEWER SAY: Now I am going to ask you the same set of questions, but over the last 6 months	
408.	In the last 6 months how many TOTAL SEXUAL PARTNERS did you have? <b>We mean all partners, any type of sex (vaginal or anal). If you cannot remember the exact number, please give me an estimate.</b>
	1. [ ] [ ] [ ] [ ] [ ] [ ] [ ]
409.	Of all these sexual partners in the last 6 months, how many of them were casual partners (only one time)?
	1. [ ] [ ] [ ] [ ] [ ] [ ] [ ]
410.	Of all these sexual partners in the last 6 months, how many of them were regular partners (more than one time)? <b>SENSE CHECK: Q408 SHOULD EQUAL Q409+410</b>
	1. [ ] [ ] [ ] [ ] [ ] [ ] [ ]

<b>INTERVIEWER SAY: The next few questions are related to anal sex</b>	
411.	Of the total sexual partnerships you had in the last 6 months, how many of those included anal sex? 1. Always 2. Usually 3. Sometimes 4. Rarely 88. Don't know 99. Decline to answer
412.	The last time you had anal sex, did you use a condom? 1. Yes 2. No 88. Don't know 99. Decline to answer
<b>INTERVIEWER SAY: The next few questions are related to paying partners.</b>	
413.	Have you ever received money, goods or services in exchange for sex? 1. Yes 2. No 88. Don't know 99. Decline to answer
414.	Have you ever received money, goods or services in exchange for sex? 1. Yes 2. No 88. Don't know 99. Decline to answer
415.	The last time you received money for goods, goods or services in exchange for sex, what was the sex of this sexual partner? 1. Female 2. Male 3. Other
416.	The last time you received money, goods or services in exchange for sex, did you use a condom? 1. Yes 2. No 88. Don't know 99. Decline to answer

417.	Have you ever given money, goods or services in exchange for sex? 1. Yes 2. No 88. Don't know 99. Decline to answer
418.	Have you given money, goods or services in exchange for sex in the last 12 months? 1. Yes 2. No 88. Don't know 99. Decline to answer
419.	The last time you gave money, goods or services in exchange for sex, what was the sex of this sexual partner? 1. Female 2. Male 3. Other
420.	The last time you received money for goods, goods or services in exchange for sex, did you use a condom? 1. Yes 2. No 88. Don't know 99. Decline to answer
<b>Casual Male Sexual Partners</b>	
<b>INTERVIEWER SAY: For the next several questions I will ask about your casual male sexual partners, what we mean by 'casual' are those you typically sleep with once, or at least not on a 'regular' basis.</b>	
421.	In the past 6 months, how often did you use condoms with casual male sexual partner(s)? 1. Always 2. Usually 3. Sometimes 4. Rarely 88. Don't know 99. Decline to answer

422.	The last time you had anal sex with a casual male partner, did you use a condom?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>3. Have never had sex with a casual partner (in my life)</li> <li>4. Have had sex with a casual partner, but not anal sex</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
423.	Who suggested that a condom be used?	<ol style="list-style-type: none"> <li>1. I did</li> <li>2. They did</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
424.	Can you tell me the reasons why you used a condom? <b>Do not read answers, record all mentioned</b>	<ol style="list-style-type: none"> <li>1. To prevent HIV/STIs</li> <li>2. Do not trust partner</li> <li>3. Messages advising the use of condoms</li> <li>4. To prevent pregnancy</li> <li>5. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

425.	Can you tell me the reasons why you did not use a condom? <b>Do not read answers, record all mentioned</b>	<ol style="list-style-type: none"> <li>1. Never heard of condoms</li> <li>2. Don't know how to obtain a condom</li> <li>3. I didn't think it was necessary</li> <li>4. I didn't think of it</li> <li>5. Not available</li> <li>6. Too expensive</li> <li>7. Partner objected</li> <li>8. Don't like them</li> <li>9. Used other contraceptive</li> <li>10. Used other prevention methods</li> <li>11. Regular partner</li> <li>12. Condoms take away pleasure</li> <li>13. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
426.	Where or how did you meet your last casual male partner?	<ol style="list-style-type: none"> <li>1. Brothel</li> <li>2. Bar/café/disco/restaurant</li> <li>3. Hotel</li> <li>4. Street, park or public transport</li> <li>5. Through friends</li> <li>6. Internet (e.g. Facebook), chat, or SMS</li> <li>7. Motel or Guest House</li> <li>8. School</li> <li>9. Party</li> <li>10. Intermediary</li> <li>11. Service station</li> <li>12. Truck stop</li> <li>13. Massage parlour</li> <li>14. Have never had a casual partner before (in my entire life)</li> <li>15. Other (specify):</li> <li>99. Don't know</li> <li>99. Decline to answer</li> </ol>

427.	The last time you had sex a casual male partner, what did you know or believe his HIV status to be?	<ul style="list-style-type: none"> <li>1. HIV-negative</li> <li>2. HIV-positive</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
<b>Regular Male Sexual Partners</b>		
<b>INTERVIEWER SAY: For the next several questions I will ask about your regular male sexual partners, what we mean by 'regular' are those you typically sleep recurringly, or more than once.</b>		
428.	In the past 6 months, how often did you use condoms with regular male sexual partner's?	<ul style="list-style-type: none"> <li>1. Always</li> <li>2. Usually</li> <li>3. Sometimes</li> <li>4. Rarely</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
429.	The last time you had anal sex with a regular male partner, did you use a condom?	<ul style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>3. Have never had sex with a regular partner (in my life)</li> <li>4. Have had sex with a regular partner, but not anal sex</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
430.	Who suggested that a condom be used?	<ul style="list-style-type: none"> <li>1. I did</li> <li>2. They did</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>

431.	Can you tell me the reasons why you used a condom?	<ul style="list-style-type: none"> <li>1. To prevent HIV/STIs</li> <li>2. Do not trust partner</li> <li>3. Messages advising the use of condoms</li> <li>4. To prevent pregnancy</li> <li>5. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
432.	Can you tell me the reasons why you did not use a condom?	<ul style="list-style-type: none"> <li>1. Never heard of condoms</li> <li>2. Don't know how to obtain a condom</li> <li>3. I didn't think it was necessary</li> <li>4. I didn't think of it</li> <li>5. Not available</li> <li>6. Too expensive</li> <li>7. Partner objected</li> <li>8. Don't like them</li> <li>9. Used other contraceptive</li> <li>10. Used other prevention methods</li> <li>11. Regular partner</li> <li>13. Condoms take away pleasure</li> <li>14. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>

433.	Where or how did you meet your last casual male partner?	<ol style="list-style-type: none"> <li>1. Brothel</li> <li>2. Bar/café/disco/restaurant</li> <li>3. Hotel</li> <li>4. Street, park or public transport</li> <li>5. Through friends</li> <li>6. Internet (e.g. Facebook), chat, or SMS</li> <li>7. Motel or Guest House</li> <li>8. School</li> <li>9. Party</li> <li>10. Intermediary</li> <li>11. Service station</li> <li>12. Truck stop</li> <li>13. Massage parlour</li> <li>14. Have never had a regular partner before (in my entire life)</li> <li>15. Other (specify):</li> <li>99. Don't know</li> <li>99. Decline to answer</li> </ol>
434.	The last time you had sex with this partner, what did you know or believe his HIV status to be?	<ol style="list-style-type: none"> <li>1. HIV-negative</li> <li>2. HIV-positive</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

Total Female Sexual Partners		
INTERVIEWER SAY: For the next several questions I will ask about your female sexual partners		
435.	Have you had sex with a female in the past 12 months?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
436.	Of all female partners, in the last 6 months days, how often did you use a condom during sex?	<ol style="list-style-type: none"> <li>1. Always</li> <li>2. Usually</li> <li>3. Sometimes</li> <li>4. Rarely</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
437.	The last time you had sex with a female partner, did you use a condom?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
438.	Who suggested that a condom be used?	<ol style="list-style-type: none"> <li>1. I did</li> <li>2. They did</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
439.	Can you tell me the reasons why you used a condom?	<ol style="list-style-type: none"> <li>1. To prevent HIV/STIs</li> <li>2. Do not trust partner</li> <li>3. Messages advising the use of condoms</li> <li>4. To prevent pregnancy</li> <li>5. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

440.	Can you tell me the reasons why you did not use a condom?	<ol style="list-style-type: none"> <li>1. Never heard of condoms</li> <li>2. Don't know how to obtain a condom</li> <li>3. I didn't think it was necessary</li> <li>4. I didn't think of it</li> <li>5. Not available</li> <li>6. Too expensive</li> <li>7. Partner objected</li> <li>8. Don't like them</li> <li>9. Used other contraceptive</li> <li>10. Used other prevention methods</li> <li>11. Regular partner</li> <li>13. Condoms take away pleasure</li> <li>14. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
441.	Where or how do you normally meet female sexual partners?	<ol style="list-style-type: none"> <li>1. Brothel</li> <li>2. Bar/café/disco/restaurant</li> <li>3. Hotel</li> <li>4. Street, park or public transport</li> <li>5. Through friends</li> <li>6. Internet (e.g. Facebook), chat, or SMS</li> <li>7. Motel or Guest House</li> <li>8. School</li> <li>9. Party</li> <li>10. Intermediary</li> <li>11. Service station</li> <li>12. Truck stop</li> <li>13. Massage parlour</li> <li>14. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

442.	The last time you had sex with a female partner, what did you know or believe her HIV status to be?	<ol style="list-style-type: none"> <li>1. HIV-negative</li> <li>2. HIV-positive</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
<b>Section 5: Condom Awareness and Usage.</b>		
<b>INTERVIEWER SAY: for the next several questions, I will ask you about condom awareness and usage</b>		
501.	Before today, had you ever heard of a condom? I mean a rubber object that is put on a man's penis before sex.	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
502.	Have you ever used a male condom during sex with any partner?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
503.	Do you know any place or person from which you can obtain male condoms?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
504.	Where can you obtain male condoms? <b>Do not read answers, record all mentioned</b>	<ol style="list-style-type: none"> <li>1. Government clinic - STD clinic</li> <li>2. Government clinic - Not STD clinic</li> <li>3. Private clinic</li> <li>4. Private pharmacy or chemist</li> <li>5. Traditional healer/herbalist</li> <li>6. Neighbourhood market/stand</li> <li>7. Friends</li> <li>8. Sex partner/s</li> <li>9. Bar</li> <li>10. Service station(s)</li> <li>11. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

505.	Do you usually carry condoms with you?	1. Yes 2. No 88. Don't know 99. Decline to answer
506.	In the last twelve months, have you been given condoms? (e.g. through an outreach service, drop-in centre or sexual health clinic)?	1. Yes 2. No 88. Don't know 99. Decline to answer
507.	How affordable do you find male condoms to be? <b>Read answers, record only one</b>	1. Affordable 2. Somewhat affordable 3. Not affordable 88. Don't know 99. Decline to answer
508.	How easy do is it to obtain male condoms? <b>Read answers, record only one</b>	1. Very easy 2. Somewhat easy 3. Not easy 88. Don't know 99. Decline to answer
509.	Where do you usually get male condoms?	1. Government clinic - STD clinic 2. Government clinic - Not STD clinic 3. Private clinic 4. Private pharmacy or chemist 5. Traditional healer/herbalist 6. Neighbourhood market/stand 7. Friends 8. Sex partner/s 9. Bar /Nightclub 10. Service station(s) 11. Other (specify): 88. Don't know 99. Decline to answer

Section 6: Lubricant access and use		
INTERVIEWER SAY: Now, I am going to ask you some questions about lubricant access and your use of lubricant.		
601.	Have you ever heard of lubricant?	1. Yes 2. No 88. Don't know 99. Decline to answer
602.	How often do you use lubricant during vaginal or anal sex?	1. Always 2. Usually 3. Sometimes 4. Rarely 5. Never 88. Don't know 99. Decline to answer
603.	What type of lubricant do you usually use? <b>Do not read answers, record all mentioned</b>	1. Glycerine 2. Saliva or water 3. Vaseline 4. Baby oil 5. Lotion 6. Other oil 7. Water-based 8. Silicone-based 9. Soap 10. Whatever we get from peer educator(s), don't know what it is 11. Other (specify): 88. Don't know 99. Decline to answer
604.	Would you consider using lubricant in the future?	1. Yes 2. No 88. Don't know 99. Decline to answer



<b>Section 7: Sexually Transmitted Infections (STIs)</b>	
<b>INTERVIEWER SAY: Now I am going to ask you some questions about sexually transmitted infections, also known as STIs or STDs. For these questions, we are asking about STIs other than HIV. Please answer to the best of your ability.</b>	
701.	Before today, had ever heard of diseases that can be transmitted sexually? 1. Yes 2. No 88. Don't know 99. Decline to answer
702.	Can you describe symptoms of sexually transmitted infections in women? <b>Do not read answers, record all mentioned</b> 1. Abdominal pain 2. Genital discharge 3. Foul smelling discharge 4. Burning pain on urination 5. Genital ulcers or sores 6. Swelling in groin area 7. Itching 8. Other (specify): 88. Don't know 99. Decline to answer
703.	Can you describe symptoms of sexually transmitted infections in men? <b>Do not read answers, record all mentioned</b> 1. Abdominal pain 2. Genital discharge 3. Foul smelling discharge 4. Burning pain on urination 5. Genital ulcers or sores 6. Swelling in groin area 7. Itching 8. Other (specify): 88. Don't know 99. Decline to answer
704.	In the last 12 months, has a doctor or a medical professional told you that you had a sexually transmitted infection? 1. Yes 2. No 88. Don't know 99. Decline to answer

705.	Have you had discharge from your penis or anus in the last 12 months? 1. Yes 2. No 88. Don't know 99. Decline to answer
706.	When did you have your last have discharge? <b>Enter JAN.1900 if don't know, enter FEB.1900 if declined to answer</b> [ ]/[ ]/[ ] (month /year)
707.	Did you seek treatment for this discharge? 1. Yes 2. No 88. Don't know 99. Decline to answer
708.	Why did you NOT seek treatment? 1. Didn't know where to go for treatment 2. Embarrassed or afraid to seek treatment 3. Could not afford treatment 4. Unable to get transportation 5. Didn't think I needed it 6. Other (specify): 88. Don't know 99. Decline to answer
709.	Have you had a sore or ulcer in the last 12 months? 1. Yes 2. No 88. Don't know 99. Decline to answer
710.	When did you last have a sore or ulcer? <b>Enter JAN.1900 if don't know, enter FEB.1900 if declined to answer</b> [ ]/[ ]/[ ] (month /year) 888. Don't know 999. Decline to answer

711.	Did you seek treatment for this sore or ulcer?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
712.	Why did you NOT seek treatment? <b>Do not read answers, record all mentioned</b>	<ol style="list-style-type: none"> <li>1. Didn't know where to go for treatment</li> <li>2. Embarrassed or afraid to seek treatment</li> <li>3. Could not afford treatment</li> <li>4. Unable to get transportation</li> <li>5. Didn't think I needed it</li> <li>6. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
713.	Where did you seek treatment the last time you had discharge, a sore or ulcer? <b>Do not read answers, record all mentioned</b>	<ol style="list-style-type: none"> <li>1. Government clinic - STD clinic</li> <li>2. Government clinic - Not STD clinic</li> <li>2. Private clinic</li> <li>3. Private pharmacy or chemist</li> <li>4. Traditional healer/herbalist</li> <li>5. Medicine or herbs from home</li> <li>6. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

714.	Why did you choose to get treatment from this source/these sources? <b>Do not read answers, record all mentioned</b>	<ol style="list-style-type: none"> <li>1. Confidentiality</li> <li>2. Affordability</li> <li>3. Recommended by friend or acquaintance</li> <li>4. Quality and/or specialized care given at this place</li> <li>5. Knows the caregivers</li> <li>6. Known friendliness of the caregivers</li> <li>7. Proximity/location</li> <li>8. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
715.	The last time you received treatment for any symptom of an STI or had a diagnosis for an STI, did you tell the health care provider that you have sex with men?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
716.	Overall, how satisfied were you with how the health care provider treated you during this last visit? <b>READ ANSWERS, RECORD ONLY ONE</b>	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Somewhat satisfied</li> <li>3. Not satisfied</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
717.	Is it possible to have an STI without there being a symptom?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

<b>Section 8: HIV/AIDS knowledge, HIV prevention and testing and counselling</b>	
<b>INTERVIEWER SAY: Now, I am going to ask you some questions about HIV and AIDS.</b>	
801.	Before today, had you ever heard of HIV or the disease called AIDS? 1. Yes 2. No 88. Don't know 99. Decline to answer
802.	From which one source of information have you acquired the most thorough understanding of HIV and AIDS? 1. School 2. Health services 3. workplace 4. Friends/family 5. Television 6. Newspaper / magazines 7. Posters / billboards 8. Pamphlet . Leaflets 9. Radio 10. NGOs 11. Other (specify): 88. Don't know 99. Decline to answer
803.	Have you ever discussed HIV or AIDS with any sexual partners? 1. Yes, all 2. Yes, some 3. No, none 88. Don't know 99. Decline to answer
804.	Have any of those partners ever told you their HIV status? 1. Yes, all 2. Yes, some 3. No, none 88. Don't know 99. Decline to answer

805.	Do you know anyone who is infected with HIV or who has died of AIDS? 1. Yes 2. No 88. Don't know 99. Decline to answer
806.	Do you have a close friend or relative who has died of HIV/AIDS? 1. Yes, close relative 2. Yes, close friend 3. No 88. Don't know 99. Decline to answer
807.	How likely do you think it is that you yourself will contract HIV / AIDS? Would you say there is no risk, a small risk, moderate risk, or high risk? 1. No risk 2. Small risk 3. Moderate risk 4. High risk 88. Don't know 99. Decline to answer
808.	Why do you think you are at risk of contracting HIV? 1. Have had many partners 2. Do not always use condoms 3. Have injected drugs 4. Partner has other partners 5. Other (specify): 88. Don't know 99. Decline to answer
809.	Why do you think you are at no or low risk of contracting HIV? <b>multiple answers possible</b> 1. Trust my partner (s) 2. Always use condoms 3. Other (specify) 88. Don't know 99. Decline to answer





1007.	Did you get the result of this last HIV test?	<ul style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
1008.	For what reason(s) did you get this last test?	<ul style="list-style-type: none"> <li>1. Wanted to know my HIV status</li> <li>2. My partner asked me to get tested</li> <li>3. Wanted to start sexual relations with a new partner</li> <li>4. Wanted to get married</li> <li>5. Need for loan/insurance coverage</li> <li>6. Employer requested the test</li> <li>7. I felt sick</li> <li>8. Advised by a health worker</li> <li>9. Advised by a peer educator</li> <li>10. Pregnant</li> <li>11. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
1009.	What was the result of your last HIV test? If you do not feel comfortable, you do not need to answer this question.	<ul style="list-style-type: none"> <li>1. HIV-negative</li> <li>2. HIV-positive</li> <li>3. Indeterminate</li> <li>4. I didn't get the result</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
1010.	If you didn't get your result, why not?	<ul style="list-style-type: none"> <li>1. I didn't have time/too busy</li> <li>2. I am not infected</li> <li>3. I was too scared</li> <li>4. The testing center didn't have my result</li> <li>5. Other (specify):</li> <li>6. I did get the result</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>

1011.	When was your first HIV-positive test? <b>Enter JAN.1900 if don't know, enter FEB.1900 if declined to answer</b>	[ ]/[ ] / [ ]/[ ]/[ ]/[ ] (month /year)
1012.	When was your last HIV-negative test? <b>Enter JAN.1900 if don't know, enter FEB.1900 if declined to answer</b>	[ ]/[ ] / [ ]/[ ]/[ ]/[ ] (month /year)
1013.	What do you think your HIV status is today?	<ul style="list-style-type: none"> <li>1. HIV-negative</li> <li>2. HIV-positive</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
1014.	How satisfied were you with the quality of services provided at the place where you got the last test? <b>Read answers, record only one</b>	<ul style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. A little satisfied</li> <li>4. Not satisfied</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
1015.	At any time during your most recent counselling and testing experience, did you reveal to the counsellor or health care provider that you have sex with men?	<ul style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>

1016.	Why did you NOT tell the counsellor or health care provider that you have sex with men? <b>Do not read answers, record all mentioned</b>	1. Afraid provider would discriminate/not provide testing 2. Afraid provider would tell police/legal authorities 3. Did not feel it was necessary to discuss 4. Afraid provider would not keep my information confidential 5. Little or no contact/interaction with counsellor or provider 6. Shy/embarassed 7. Provider already knew 8. Other (specify): 88. Don't know 99. Decline to answer
1017.	Did you feel that the counsellor or health care provider reacted to you in a negative or discriminatory way because you exchange sex for money?	1. Yes 2. No 88. Don't know 99. Decline to answer
1018.	What did the counsellor do to make you feel that way? <b>Do not read answers, record all mentioned</b>	1. Was very uncomfortable discussing 2. Stopped talking to me 3. Asked me to leave 4. Verbally abused or scolded me 5. Other (specify): 88. Don't know 99. Decline to answer
1019.	If someone in your community has a sexually transmitted infection, where can they get a confidential advice and treatment? <b>Do not read answers, record all mentioned</b>	1. Ayurvedic physician 2. Pharmacy 3. Private clinic 4. Government clinic - STD clinic 5. Other Government clinic/hospital 88. Don't know 99. Decline to answer

Section 11: Stigma, discrimination and violence		
INTERVIEWER SAY: Now I will ask you some questions about discrimination and violence. While some people may have experienced these, others may not. Please remember your answers will be kept private.		
1101.	In the past 12 months, have you been refused health care because someone believed you sell sex to men?	1. Yes 2. No 88. Don't know 99. Decline to answer
1102.	In the past 12 months, have you been refused police assistance because someone believed you sell sex to men?	1. Yes 2. No 88. Don't know 99. Decline to answer
1103.	In the past 12 months, have you had verbal insults directed at you because someone believed you sell sex to men?	1. Yes 2. No 88. Don't know 99. Decline to answer
1104.	In the past 12 months, have you been hit, kicked, or beaten because someone believed you sell sex to men?	1. Yes 2. No 88. Don't know 99. Decline to answer
1105.	In the past 12 months, did anyone force you to have sex with them by sexually assaulting or raping you?	1. Yes 2. No 88. Don't know 99. Decline to answer

1106.	Who was the person who last forced you to have sex with them? <b>Do not record answers, record only one</b>	<ol style="list-style-type: none"> <li>1. Do not know the person</li> <li>2. Social acquaintance</li> <li>3. Family/relative</li> <li>4. Police</li> <li>5. Client</li> <li>6. Other sex worker</li> <li>7. Pimp</li> <li>8. Non-paying partner or boyfriend</li> <li>9. Other (specify)</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1107.	Did you seek medical treatment after this happened?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1108.	Did you report this incident to the police?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
<b>Section 12: Healthcare utilization</b>		
<b>INTERVIEWER SAY: Now I am going to ask you some questions about your experience with the health care system.</b>		
1201.	During the last 12 months have you sought medical care for any reason?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1202.	In the past 12 months, have you had difficulty getting medical care when you sought it?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

1203.	What difficulty did you have?	<ol style="list-style-type: none"> <li>1. Too expensive</li> <li>2. Too far away</li> <li>3. Could not take time from work</li> <li>4. Long waiting times</li> <li>5. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
<b>Section 13: Program coverage</b>		
<b>INTERVIEWER SAY: Now I am going to ask you some questions about your experience with social programs.</b>		
1301.	In the last 6 months, have you been in contact with a health peer educator in the community?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1302.	In the last 6 months, how many times have you been in contact with the peer educator? <b>If don't know 888, 999 if declined to answer</b>	<p>[ ] [ ] (number of times)</p> <ol style="list-style-type: none"> <li>888. Don't know</li> <li>999. Decline to answer</li> </ol>
1303.	What services or information did you receive from the peer educator? <b>Do not read answers, record all mentioned</b>	<ol style="list-style-type: none"> <li>1. General HIV/STI prevention/transmission information</li> <li>2. Condoms</li> <li>3. Referral for STI treatment</li> <li>4. Referral for VCT</li> <li>5. Medical visit</li> <li>6. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>



Section 14: Alcohol and Drug use	
INTERVIEWER SAY: Now, I would like to ask some questions about your alcohol and drug use.	
1401.	Have you ever had a drink containing alcohol? 1. Yes 2. No 88. Don't know 99. Decline to answer
1402.	During the past 4 weeks, how often have you had a drink containing alcohol? <b>Do not read answers, record all mentioned</b> 1. I never drink alcohol 2. At least once a week 3. Less than once a week 4. Never in the last 4 weeks 5. Every day 88. Don't know 99. Decline to answer
INTERVIEWER SAY: Some people have tried a range of different types of drugs. How often have you used the following drugs in the past 12 months?	
1403.	HAVE RESPONDENT ANSWER FOR EACH SEPARATELY 1. Heroin 2. Cannabis 3. Cocaine 4. Ecstasy 5. Amphetamines 6. Opium 7. Hashish 8. Other drugs? How often? 1. Yes 2. No 88. Don't know 99. Decline to answer
1404.	Some people have tried injecting drugs using a syringe or needle. In the past 12 months, have you injected drugs? 1. Yes 2. No 88. Don't know 99. Decline to answer

1405.	In the last 12 months, how frequently did you inject drugs? 1. Monthly or less 2. Two to four times a month 3. Two to three times a week 4. Four or more times a week 88. Don't know 99. Decline to answer
1406.	What drug do you normally inject? 1. Heroin 2. Meth 3. Speedball (heroin plus cocaine) 4. Other (specify): 88. Don't know 99. Decline to answer
1407.	How long after you started taking drugs did you start injecting? (write number and the word months or years?) <b>Write 888 if don't know, 999 if decline to answer</b> [ ] [ ] / [ ] [ ] [ ] [ ] (month / year) 88. Don't know 99. Decline to answer
1408.	In the last 6 months, have you shared a syringe or needle with anyone else when injecting drugs? 1. Yes 2. No 88. Don't know 99. Decline to answer

Section 15: Programme Planning	
INTERVIEWER SAY: Just a couple more questions! Now I am going to ask you some questions related to planning programmes and interventions for men who have sex with men.	
1501.	How often in the past month did you listen to the radio 1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer
1502.	Which radio stations do you mostly listen to? <b>Write 888 if don't know, 999 if decline to answer</b>
1503.	How often in the past month did you watch TV? 1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer
1504.	Which TV stations do you mostly watch? <b>Write 888 if don't know, 999 if decline to answer</b>
1505.	How often in the past month did you read the newspaper? 1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer

1506.	Which newspapers do you mostly read? 1. _____ 888. Don't know 999. Decline to answer
1507.	How often did you surf the internet in the past month? 1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer
1508.	Which sites do you mostly visit? 1. _____ 888. Don't know 999. Decline to answer
1509.	How often do you use the internet to search for sexual partners? 1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer
1510.	Do you have a mobile phone? 1. Yes 2. No 88. Don't know 99. Decline to answer
1511.	Do you use this mobile phone to communicate with men who have sex with men? 1. Yes 2. No 88. Don't know 99. Decline to answer

1512.	Would you be interested in receiving text messages on your mobile phone, with health and HIV related information?	1. Yes 2. No 88. Don't know 99. Decline to answer
1513.	Would you attend group learning activities if they were offered?	1. Yes 2. No 88. Don't know 99. Decline to answer
RE-ENTER THE PARTICIPANT'S COUPON NUMBER		Coupon Code _____
RE-ENTER THE PARTICIPANT'S RDS NUMBER		RDS _____
<b>INTERVIEWER SAY: That is the end. Thank you so much for your time. I will take you now to the nurse.</b>		



204.	What is your citizenship?	1. Sri Lankan 2. Other (specify): 88. Don't know 99. Decline to answer
205.	What country were you born in?	1. Sri Lanka 88. Don't know 99. Decline to answer
206.	In which district have you mostly lived in the past one year?	1. Colombo 2. Kandy 3. Galle 4. Kalutara 5. Anuradhapura 88. Other (specify) 99. Decline to answer
207.	What language(s) do you speak most commonly at home?	1. Sinhalese 2. Tamil 3. English 4. Other (specify):
208	What is the highest level of education you completed?	1. Never attended school 2. Grade 1 - 5 3. Grade 6 - 10 4. Passed O/L 5. Passed A/L 6. Completed diploma 7. Completed degree 8. Other (specify): 88. Don't know 99. Decline to answer

209.	Can you read and write?	1. Yes 2. No 3. Don't know 4. Decline to answer
210	Are you currently a student or enrolled as a learner?	1. Yes 2. No
210b.	If yes, currently enrolled as a learner, with what type of institution are you enrolled?	1. University 2. Technical College 3. Vocational School 4. Other (specify):
211.	What is your ethnicity? <b>DO NOT READ ANSWERS, RECORD ONLY ONE</b>	1. Sinhalese 2. Sri Lankan Tamil 3. Indian Tamil 4. Moor 5. Berger 6. Malay 7. Other (specify): 99. Decline to answer
212.	What is your monthly personal income?	1. Less than 5,000 Rupees 2. 5,000 - 10,000 3. 10,001 - 20,000 4. 20,001 - 30,000 5. 30,001 - 40,000 6. > 40,001 88. Don't know 99. Decline to answer
213.	Including yourself, how many people depend on this income? Write 999 if refused to answer	[ ] [ ] [ ] 999. Decline to answer

214.	How many years have you lived in [place of interview/study district]? In whole years, months written on next screen, if less than one year, write zero (00) on this screen, Write 888 if don't know, 999 if decline to answer	[ ] [ ] (number of years) [ ] [ ] (and number of months) 888. Don't know 999. Decline to answer
215.	Is [insert study location] your primary residence?	1. Yes 2. No 88. Don't know 99. Decline to answer
216.	If your primary residence is not in (survey district) _____ where is your primary residence? <b>ASK FOR CITY Write 999 if refused to answer</b>	1. 999. Decline to answer
217.	What is your occupation? <b>DO NOT READ ANSWERS, RECORD ONLY ONE</b>	1. Street vendor/casual labourer 2. Factory worker 3. Professional/banker/accountant 4. Teacher 5. Business owner 6. Hairdresser/beautician/masseuse 7. Waitress/bartender/hotel employee 8. Musician/dancer/performer 9. Tourism/travel agent/tour guide 10. Government worker 11. Security guard 12. Fisherman/seafarer 13. Farmer/agriculture worker 14. Taxi driver / Three wheeler driver 15. None 16. Other (specify): 88. Don't know

Section 3: Marriage and Family		
301.	What is your current marital status? <b>READ ANSWERS, RECORD ONLY ONE</b>	1. Single (never married) 2. Living together, but not married 3. Married 4. Divorced / Separated 5. Widowed 99. Decline to answer
302.	Who do you currently live with? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Husband / wife 2. Other sexual partner 3. Parents 4. Siblings 5. Children 6. Other family/relatives 7. Friend or roommate (not sexual partner) 8. Live alone 9. Co-workers 10. Other (specify): 88. Don't know 99. Decline to answer
303.	How would you describe where you live? <b>RECORD ONLY ONE</b>	1. Temporary shelter 2. Boarding house 3. Parents home 4. My home 5. Lodging 6. On the street 7. Brothel 8. Other (specify) 99. Decline to answer
304.	How many children do you have?	[ ] [ ] [ ] 99. Decline to answer

Section 4: Sexual History	
INTERVIEWER SAY: I will now ask you some information about your sexual history, please remember all information is confidential.	
General Sexual History	
401. Have you ever had sex with a woman (vaginal or anal sex)? Write 999 if refused to answer	1. Yes 2. No 999. Decline to answer
402. Have you ever had anal sex with a man? <b>Write 999 if refused to answer</b>	1. Yes 2. No 999. Decline to answer
403. At what age did you first have anal sex with a man? Write 888 if don't know, 999 if decline to answer	[ ] (age in years) 888. Don't know 999. Decline to answer
404. How old was this partner, with whom you first had anal sex? <b>Write 888 if don't know, 999 if decline to answer</b>	[ ] (Age in years) 888. Don't know 999. Decline to answer
405. In the last 7 days how many TOTAL SEXUAL PARTNERS did you have? <b>Write 888 if don't know, 999 if decline to answer</b>	1. [ ] 888. Don't know 999. Decline to answer
406. Of all these sexual partners in the last 7 days, how many of them were casual partners (only one time)? <b>Write 888 if don't know, 999 if decline to answer</b>	1. [ ] 888. Don't know 999. Decline to answer
407. Of all these sexual partners in the last 7 days, how many of them were regular partners (more than one time)? SENSE CHECK: Q405 SHOULD EQUAL Q406+407, Write 888 if don't know, write 999 if refuse to answer	1. [ ] 888. Don't know 999. Decline to answer

INTERVIEWER SAY: Now I am going to ask you the same set of questions, but over the last 6 months	
408. In the last 6 months how many TOTAL SEXUAL PARTNERS did you have? <b>We mean all partners, any type of sex (vaginal or anal). If you cannot remember the exact number, please give me an estimate   Write 888 if don't know, write 999 if refuse to answer</b>	1. [ ] 888. Don't know 999. Decline to answer
409. Of all these sexual partners in the last 6 months, how many of them were casual partners (only one time)? <b>Write 999 if refused to answer</b>	1. [ ] 999. Decline to answer
410. Of all these sexual partners in the last 6 months, how many of them were regular partners (more than one time)? <b>SENSE CHECK: Q408 SHOULD EQUAL Q409+410   Write 888 if don't know, write 999 if refuse to answer</b>	1. [ ] 888. Don't know 999. Decline to answer
Paying Partners	
INTERVIEWER SAY: The next few questions are related to paying partners.	
411. Have you ever received money, goods or services in exchange for sex? <b>Write 999 if refused to answer</b>	1. Yes 2. No 999. Decline to answer
412. Have you received money, goods or services in exchange for sex in the last 12 months? <b>Write 999 if refused to answer</b>	1. Yes 2. No 999. Decline to answer

413.	The last time you received money for goods, goods or services in exchange for sex, what was the sex of this sexual partner? <b>Write 999 if refused to answer</b>	1. Female 2. Male 3. Other (specify) 999. Refuse to Answer
414.	The last time you received money, goods or services in exchange for sex, did you use a condom? <b>Write 999 if refused to answer</b>	1. Yes 2. No 999. Decline to answer
415.	Have you ever given money, goods or services in exchange for sex? <b>Write 999 if refused to answer</b>	1. Yes 2. No 999. Decline to answer
416.	Have you given money, goods or services in exchange for sex in the last 12 months? <b>Write 999 if refused to answer</b>	1. Yes 2. No 999. Decline to answer
417.	The last time you gave money, goods or services in exchange for sex, what was the sex of this sexual partner? <b>Write 999 if refused to answer</b>	1. Female 2. Male 3. Other (specify) 999. Refuse to Answer
418.	The last time you received money for goods, goods or services in exchange for sex, did you use a condom? <b>Write 999 if refused to answer</b>	1. Yes 2. No 999. Decline to answer

Casual Partners		
INTERVIEWER SAY: For the next several questions I will ask about your casual sexual partners, what we mean by 'casual' are those you typically sleep with once, or at least not on a 'regular' basis.		
419.	Would you say your casual partners are mostly female or male? By casual we mean somebody you usually have sex with only once, or someone who is only in town for a short period of time, visiting. Not someone you have sex with on a regular basis.	1. Mostly Male 2. Mostly Female 3. The Same - half male, half female 4. Other (specify): 5. I do not have casual partners 88. Don't know 99. Decline to answer
420.	Of all casual partners, in the last 12 months days, how often did you use a condom during sex?	1. Always 2. Usually 3. Sometimes 4. Rarely 5. Did not have a casual partner in the last 12 months 88. Don't know 99. Decline to answer
421.	What was the sex of your last casual partner? <b>Write 999 if refused to answer</b>	1. Female 2. Male 3. Other 999. Refuse to Answer
422.	The last time you had sex with a casual partner, did you use a condom?	1. Yes 2. No 88. Don't know 99. Decline to answer
423.	Who suggested that a condom be used?	1. I did 2. He did 88. Don't know 99. Decline to answer



424.	Can you tell me the reasons why you used a condom? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	<ol style="list-style-type: none"> <li>1. To prevent HIV/STIs</li> <li>2. Do not trust partner</li> <li>3. Messages advising the use of condoms</li> <li>4. To prevent pregnancy</li> <li>5. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
425.	Can you tell me the reasons why you did not use a condom? <b>Do not read answers, record all mentioned</b>	<ol style="list-style-type: none"> <li>1. Never heard of condoms</li> <li>2. Don't know how to obtain a condom</li> <li>3. I didn't think it was necessary</li> <li>4. I didn't think of it</li> <li>5. Not available</li> <li>6. Too expensive</li> <li>7. Partner objected</li> <li>8. Don't like them</li> <li>9. Used other contraceptive</li> <li>10. Used other prevention methods</li> <li>11. Regular partner</li> <li>13. Condoms take away pleasure</li> <li>14. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

426.	Where or how did you meet your last casual partner? <b>DO NOT READ ANSWERS, RECORD ONLY ONE</b>	<ol style="list-style-type: none"> <li>1. Brothel</li> <li>2. Bar/café/disco/restaurant</li> <li>3. Hotel</li> <li>4. Street, park or public transport</li> <li>5. Through friends</li> <li>6. Internet (e.g. Facebook), chat, or SMS</li> <li>7. Motel or Guest House</li> <li>8. School</li> <li>9. Party</li> <li>10. Intermediary</li> <li>11. Service station</li> <li>12. Truck stop</li> <li>13. Massage parlour</li> <li>14. Other (specify):</li> <li>99. Don't know</li> <li>99. Decline to answer</li> </ol>
427.	The last time you had sex with this partner, what did you know or believe his HIV status to be?	<ol style="list-style-type: none"> <li>1. HIV-negative</li> <li>2. HIV-positive</li> <li>3. I did not know / ask</li> <li>888. Don't know</li> <li>999. Decline to answer</li> </ol>

Regular Sexual Partners	
<p><b>INTERVIEWER SAY: For the next several questions I will ask about your regular male sexual partners, what we mean by 'regular' are those you typically sleep recurringly, or more than once.</b></p>	
428.	<p>Would you say your regular partners are mostly female or male? <b>By regular we mean somebody you have sex with on a regular basis, this does not have to be a husband or wife.</b></p> <p>1. Mostly Male 2. Mostly Female 3. The Same - half male, half female 4. Other (specify): 5. I do not have regular partners 888. Don't know 999. Decline to answer</p>
429.	<p>Of all regular partners, in the last 12 months, how often did you use a condom during sex?</p> <p>1. Always 2. Usually 3. Sometimes 4. Rarely 5. Did not have a regular partner in the last 12 months 888. Don't know 999. Decline to answer</p>
430.	<p>What was the sex of your last regular partner?</p> <p>1. Female 2. Male 3. Other (specify) 999. Refuse to Answer</p>
431.	<p>The last time you had sex with a regular partner, did you use a condom?</p> <p>1. Yes 2. No 88. Don't know 99. Decline to answer</p>
432.	<p>Who suggested that a condom be used?</p> <p>1. I did 2. He did 88. Don't know 99. Decline to answer</p>

433.	Can you tell me the reasons why you used a condom?	<p>1. To prevent HIV/STIs 2. Do not trust partner 3. Messages advising the use of condoms 4. To prevent pregnancy 5. Other (specify): 88. Don't know 99. Decline to answer</p>
434.	Can you tell me the reasons why you did not use a condom? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	<p>1. Never heard of condoms 2. Don't know how to obtain a condom 3. I didn't think it was necessary 4. I didn't think of it 5. Not available 6. Too expensive 7. Partner objected 8. Don't like them 9. Used other contraceptive 10. Used other prevention methods 11. Regular partner 13. Condoms takes away pleasure 14. Other (specify): 88. Don't know 99. Decline to answer</p>

435.	Where or how did you meet your last regular partner? <b>Do not read answers, record all mentioned</b>	<ol style="list-style-type: none"> <li>1. Brothel</li> <li>2. Bar/café/disco/restaurant</li> <li>3. Hotel</li> <li>4. Street, park or public transport</li> <li>5. Through friends</li> <li>6. Internet (e.g. Facebook), chat, or SMS</li> <li>7. Motel or Guest House</li> <li>8. School</li> <li>9. Party</li> <li>10. Intermediary</li> <li>11. Service station</li> <li>12. Truck stop</li> <li>13. Massage parlour</li> <li>14. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
<b>Interactions with tourists/clients</b>		
<b>INTERVIEWER SAYS: The next questions are specifically related to your interactions with tourists, as part of the beach boy culture.</b>		
436.	Please can you describe the nature of your interactions with tourists in and around the coastal areas? <b>Do not read answers, record all mentioned</b>	<ol style="list-style-type: none"> <li>1. Tour guide</li> <li>2. Driver</li> <li>3. I have sex with them, no money is exchanged for sex</li> <li>4. They pay me for sex</li> <li>5. Other (specify):</li> <li>999. Decline to answer</li> </ol>
437.	How often do your services as a beach boy, include sexual relations?	<ol style="list-style-type: none"> <li>1. Every time</li> <li>2. Almost every time</li> <li>3. Sometimes</li> <li>4. Never</li> <li>888. Don't know</li> <li>999. Decline to answer</li> </ol>

438.	The last time you had sex with a tourist were you paid to have sex?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>99. Decline to answer</li> </ol>
438b.	How much were you paid?	
439.	The last time you had sex with a tourist, if you weren't paid money, was anything else exchanged (e.g. were you given anything else?)	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>99. Decline to answer</li> </ol>
440.	Are you usually paid separately for the sexual relations and the other non sex activities (e.g. tour guide, etc.)? <b>DO NOT READ ANSWERS</b>	<ol style="list-style-type: none"> <li>1. Paid for tour guide/other activities, sex is provided for free</li> <li>2. Paid for tour guide/other activities and sex separately</li> <li>3. Other (specify)</li> <li>888. Don't know</li> <li>999. Decline to answer</li> </ol>
441.	How much are you usually paid per sex act? (Rupees)	<ol style="list-style-type: none"> <li>1. ___ Rupees</li> <li>2. Other (specify):</li> <li>888. Don't know</li> <li>999. Decline to answer</li> </ol>
442.	The last time you had sex with a tourist, did you use a condom?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>99. Decline to answer</li> </ol>
443.	How do you typically meet tourist clients?	<ol style="list-style-type: none"> <li>1. On the beach</li> <li>2. Bars / clubs / restaurants</li> <li>3. Other (specify)</li> <li>888. Don't know</li> <li>999. Decline to answer</li> </ol>
444.	What nationalities are most of your tourist clients?	<ol style="list-style-type: none"> <li>1. Sri Lankan</li> <li>2. Other (specify)</li> <li>888. Don't know</li> <li>999. Decline to answer</li> </ol>

445.	Would you say you have more often sexual relations with women or men tourists?	1. Female 2. Male 888. Don't know 999. Decline to answer
<b>Section 5: Condom Awareness and Usage</b>		
<b>INTERVIEWER SAY: FOR THE NEXT SEVERAL QUESTIONS, I WILL ASK YOU ABOUT CONDOM AWARENESS AND USAGE</b>		
501.	Before today, had you ever heard of a condom? I mean a rubber object that is put on a man's penis before sex.	1. Yes 2. No 88. Don't know 99. Decline to answer
502.	Have you ever used a male condom during sex with any partner?	1. Yes 2. No 88. Don't know 99. Decline to answer
503.	Do you know any place or person from which you can obtain male condoms?	1. Yes 2. No 88. Don't know 99. Decline to answer
504.	Where can you obtain male condoms? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Government clinic - STD clinic 2. Government clinic - Not STD clinic 3. Private clinic 4. Private pharmacy or chemist 5. Traditional healer/herbalist 6. Neighbourhood market/stand 7. Friends 8. Sex partner/s 9. Bar / Nightclub 10. Service station(s) 11. Other (specify): 88. Don't know 99. Decline to answer

505.	Do you usually carry condoms with you?	1. Yes 2. No 88. Don't know 99. Decline to answer
506.	In the last twelve months, have you been given condoms? (e.g. through an outreach service, drop-in centre or sexual health clinic)?	1. Yes 2. No 88. Don't know 99. Decline to answer
507.	How affordable do you find male condoms to be? <b>READ ANSWERS, RECORD ONLY ONE</b>	1. Affordable 2. Somewhat affordable 3. Not affordable 88. Don't know 99. Decline to answer
508.	How easy do it is to obtain male condoms? <b>READ ANSWERS, RECORD ONLY ONE</b>	1. Very easy 2. Somewhat easy 3. Not easy 88. Don't know 99. Decline to answer
509.	Where do you usually get male condoms? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Government clinic - STD clinic 2. Government clinic - Not STD clinic 3. Private clinic 4. Private pharmacy or chemist 5. Traditional healer/herbalist 6. Neighbourhood market/stand 7. Friends 8. Sex partner/s 9. Bar / Nightclub 10. Service station(s) 11. Other (specify): 88. Don't know 99. Decline to answer

Section 6: Lubricant access and use	
INTERVIEWER SAY: Now, I am going to ask you some questions about lubricant access and your use of lubricant.	
601.	Have you ever heard of lubricant? 1. Yes 2. No 88. Don't know 99. Decline to answer
602.	How often do you use lubricant during vaginal or anal sex? 1. Always 2. Usually 3. Sometimes 4. Rarely 5. Never 88. Don't know 99. Decline to answer
603.	What type of lubricant do you usually use? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b> 1. Glycerine 2. Saliva or water 3. Vaseline 4. Baby oil 5. Lotion 6. Other oil 7. Water-based 8. Silicone-based 9. Soap 10. Whatever we get from peer educator(s), don't know what it is 11. Other (specify): 88. Don't know 99. Decline to answer
604.	Would you consider using lubricant in the future? 1. Yes 2. No 88. Don't know 99. Decline to answer

Section 7: Sexually Transmitted Infections (STIs)	
INTERVIEWER SAY: Now I am going to ask you some questions about sexually transmitted infections, also known as STIs or STDs. For these questions, we are asking about STIs other than HIV. Please answer to the best of your ability.	
701.	Before today, had ever heard of diseases that can be transmitted sexually? 1. Yes 2. No 88. Don't know 99. Decline to answer
702.	Can you describe symptoms of sexually transmitted infections in women? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b> 1. Abdominal pain 2. Genital discharge 3. Foul smelling discharge 4. Burning pain on urination 5. Genital ulcers or sores 6. Swelling in groin area 7. Itching 8. . Other (specify): 88. Don't know 99. Decline to answer
703.	Can you describe symptoms of sexually transmitted infections in men? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b> 1. Abdominal pain 2. Genital discharge 3. Foul smelling discharge 4. Burning pain on urination 5. Genital ulcers or sores 6. Swelling in groin area 7. Itching 8. . Other (specify): 88. Don't know 99. Decline to answer
704.	In the last 12 months, has a doctor or a medical professional told you that you had a sexually transmitted infection? 1. Yes 2. No 88. Don't know 99. Decline to answer

705.	Have you had discharge from your penis or anus in the last 12 months?	1. Yes 2. No 88. Don't know 99. Decline to answer
706.	When did you last have discharge? <b>Enter JAN. 1900 if don't know, enter FEB. 1900 if declined to answer</b>	[ ] [ ] / [ ] [ ] [ ] [ ] [ ] [ ] (month /year)
707.	Did you seek treatment for this discharge?	1. Yes 2. No 888. Don't know 999. Decline to answer
708.	Why did you NOT seek treatment? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Didn't know where to go for treatment 2. Embarrassed or afraid to seek treatment 3. Could not afford treatment 4. Unable to get transportation 5. Didn't think I needed it 6. Other (specify): 88. Don't know 99. Decline to answer
709.	Have you had a sore or ulcer in the last 12 months?	1. Yes 2. No 88. Don't know 99. Decline to answer
710.	When did you last have a sore or ulcer? <b>Enter JAN. 1900 if don't know, enter FEB. 1900 if declined to answer</b>	[ ] [ ] [ ] / [ ] [ ] [ ] [ ] [ ] [ ] (month /year)

711.	Did you seek treatment for this sore or ulcer?	1. Yes 2. No 88. Don't know 99. Decline to answer
712.	Why did you NOT seek treatment? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Didn't know where to go for treatment 2. Embarrassed or afraid to seek treatment 3. Could not afford treatment 4. Unable to get transportation 5. Didn't think I needed it 6. Other (specify): 88. Don't know 99. Decline to answer
713.	Where did you seek treatment the last time you had discharge, sore or ulcer? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Government clinic - STD clinic 2. Government clinic - Not STD clinic 2. Private clinic 3. Private pharmacy or chemist 4. Traditional healer/herbalist 5. Medicine or herbs from home 6. Other (specify): 88. Don't know 99. Decline to answer

714.	Why did you choose to get treatment from this source/these sources? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	<ol style="list-style-type: none"> <li>1. Confidentiality</li> <li>2. Affordability</li> <li>3. Recommended by friend or acquaintance</li> <li>4. Quality and/or specialized care given at this place</li> <li>5. Knows the caregivers</li> <li>6. Known friendliness of the caregivers</li> <li>7. Proximity/location</li> <li>8. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
715.	The last time you received treatment for any symptom of an STI or had a diagnosis for an STI, did you tell the health care provider that you have sex with men?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
716.	Overall, how satisfied were you with how the health care provider treated you during this last visit? <b>READ ANSWERS, RECORD ONLY ONE</b>	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Somewhat satisfied</li> <li>3. Not satisfied</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
717.	Is it possible to have an STI without there being a symptom?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

<b>Section 8: HIV/AIDS knowledge, HIV prevention and testing and counselling</b>	
<b>INTERVIEWER SAY: Now, I am going to ask you some questions about HIV and AIDS.</b>	
801.	Before today, had you ever heard of HIV or the disease called AIDS?  <ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
802.	From which one source of information have you acquired the most thorough understanding of HIV and AIDS?  <ol style="list-style-type: none"> <li>1. School</li> <li>2. Health services</li> <li>3. workplace</li> <li>4. Friends/family</li> <li>5. Television</li> <li>6. Newspaper / magazines</li> <li>7. Posters / billboards</li> <li>8. Pamphlet . Leaflets</li> <li>9. Radio</li> <li>10. NGOs</li> <li>11. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
803.	Have you ever discussed HIV or AIDS with any sexual partners?  <ol style="list-style-type: none"> <li>1. Yes, all</li> <li>2. Yes, some</li> <li>3. No, none</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
804.	Have any of those partners ever told you their HIV status?  <ol style="list-style-type: none"> <li>1. Yes, all</li> <li>2. Yes, some</li> <li>3. No, none</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

805.	Do you know anyone who is infected with HIV or who has died of AIDS?	1. Yes 2. No 88. Don't know 99. Decline to answer
806.	Do you have a close friend or relative who has died of HIV/AIDS?	1. Yes, close relative 2. Yes, close friend 3. No 88. Don't know 99. Decline to answer
807.	How likely do you think it is that you yourself will contract HIV / AIDS? Would you say there is no risk, a small risk, moderate risk, or high risk?	1. No risk 2. Small risk 3. Moderate risk 4. High risk 88. Don't know 99. Decline to answer
808.	Why do you think you are at risk of contracting HIV?	1. Have had many partners 2. Do not always use condoms 3. Have injected drugs 4. Partner has other partners 5. Other (specify): 88. Don't know 99. Decline to answer
809.	Why do you think you are at no or low risk of contracting HIV? <b>Multiple answers possible</b>	1. Trust my partner (s) 2. Always use condoms 3. Other (specify) 88. Don't know 99. Decline to answer

Knowledge Questions		
INTERVIEWER SAYS: I am now going to ask you some questions about your knowledge and attitudes around HIV and AIDS.		
810.	Can the risk of HIV transmission be reduced by having sex with only one uninfected partner who has no other partners?	1. Yes 2. No 88. Don't know 99. Decline to answer
811.	Can people reduce their chance of getting HIV by using a condom every time they have sex?	1. Yes 2. No 88. Don't know 99. Decline to answer
812.	Can a healthy looking person have HIV?	1. Yes 2. No 88. Don't know 99. Decline to answer
813.	Can people get HIV from mosquito bites?	1. Yes 2. No 88. Don't know 99. Decline to answer
814.	Can a person get HIV by sharing food with a person who has HIV/AIDS?	1. Yes 2. No 88. Don't know 99. Decline to answer
815.	Can a woman who has HIV pass on the disease to her unborn child?	1. Yes 2. No 88. Don't know 99. Decline to answer
816.	If a relative of yours became ill, would you be willing to care for home or her in your household?	1. Yes 2. No 88. Don't know 99. Decline to answer



817.	If a student has HIV, but is not sick, should he or she be allowed to continue attending school?	1. Yes 2. No 88. Don't know 99. Decline to answer
818.	If you knew a shopkeeper or food seller had HIV, would you buy food from them?	1. Yes 2. No 88. Don't know 99. Decline to answer
819.	If a member of your family had HIV, would you want it to remain a secret?	1. Yes 2. No 88. Don't know 99. Decline to answer
820.	Have you heard about special antiretroviral drugs that people infected with HIV/AIDS can get from a doctor or nurse to help them live longer?	1. Yes 2. No 88. Don't know 99. Decline to answer
<b>Section 9: Network Size and Population Size Estimation</b>		
<b>INTERVIEWER SAY: I am going to ask you to give me some estimates about the number of beach boys who live in this city, and a few other questions to help us estimate the size of this population. Please take your time to carefully think about these questions.</b>		
901.	How many men who have sex with men live in _____? Write 888 if don't know, 999 if decline to answer	[ ][ ][ ] [ ][ ][ ] [ ][ ][ ] (number of persons) 888. Don't know 999. Decline to answer
902.	How many beach boys are age 18 and over live in (survey district) _____? <b>Write 888 if don't know, 999 if decline to answer</b>	[ ][ ][ ][ ][ ] [ ][ ][ ][ ] [ ][ ][ ][ ] (number of persons) 888. Don't know 999. Decline to answer

903.	How many beach boys, age 18 and over, live in (survey district) _____, and you would consider giving a recruitment coupon to?	1. Yes 2. No 88. Don't know 99. Decline to answer
904.	Have you been enrolled by an NGO in the Global fund outreach programme for beach boys?	Yes No 88. Don't remember 99. Decline to answer
905.	if yes, what is the name of the NGO and when were you enrolled? <b>Write 888 if don't know, 999 if decline to answer</b>	_____ _____ 888. Don't know 999. Decline to answer
906.	When were you enrolled? <b>Write 888 if don't know, 999 if decline to answer</b>	[ ][ ][ ][ ][ ] [ ][ ][ ][ ] [ ][ ][ ][ ] 888. Don't know 999. Decline to answer
<b>Section 10: HIV Testing</b>		
<b>INTERVIEWER SAY: Now, I am going to ask you questions about HIV testing and your experience. Remember that you do not have to answer any questions you do not feel comfortable answering.</b>		
1001.	Do you know where you can go if you wish to receive an HIV test?	1. Yes 2. No 88. Don't know 99. Decline to answer
1002.	Have you ever been tested for HIV?	1. Yes 2. No 88. Don't know 99. Decline to answer
1003.	Did you voluntarily undergo the test, or were you required to have it?	1. Yes 2. No 88. Don't know 99. Decline to answer

1004.	Where did you get the test?	1. Government clinic - STD clinic 2. Government clinic - Not STD clinic 2. Private clinic 3. Private pharmacy or chemist 4. Traditional healer/herbalist 5. Medicine or herbs from home 6. Other (specify): 88. Don't know 99. Decline to answer
1005.	Why have you not had an HIV test? <b>Do not read answers, record all mentioned</b>	1. Don't know where to go 2. I always use condoms 3. Not at risk of getting HIV 4. Didn't have time/too busy 5. I trust my partner 6. Afraid of knowing I may be HIV-positive 7. Lack of confidentiality 8. Inconvenient testing location or hours 9. No money 10. Other (specify): 88. Don't know 99. Decline to answer
1006.	What was the date of your <b>last</b> HIV test? <b>Enter JAN. 1900 if don't know, enter FEB. 1900 if declined to answer</b>	[ ] [ ] / [ ] [ ] [ ] [ ] (month /year)
1007.	Did you get the result of this HIV test?	1. Yes 2. No 88. Don't know 99. Decline to answer

1008.	For what reason(s) did you get this last test?	1. Wanted to know my HIV status 2. My partner asked me to get tested 3. Wanted to start sexual relations with a new partner 4. Wanted to get married 5. Need for loan/insurance coverage 6. Employer requested the test 7. I felt sick 8. Advised by a health worker 9. Advised by a peer educator 10. Pregnant 11. Other (specify): 88. Don't know 99. Decline to answer
1009.	What was the result of your last HIV test? <b>If you do not feel comfortable, you do not need to answer this question.</b>	1. HIV-negative 2. HIV-positive 3. Indeterminate 4. I didn't get the result 88. Don't know 99. Decline to answer
1010.	If you didn't get your result, why not?	1. I didn't have time/too busy 2. I am not infected 3. I was too scared 4. The testing centre didn't have my result 5. Other (specify): 6. I did get the result 88. Don't know 99. Decline to answer
1011.	When was your first HIV-positive test? <b>Enter JAN. 1900 if don't know, enter FEB. 1900 if declined to answer</b>	[ ] [ ] / [ ] [ ] [ ] [ ] (month /year)

1012.	When was your last HIV-negative test? <b>Enter JAN. 1900 if don't know, enter FEB. 1900 if declined to answer</b>	[ ]/[ ] / [ ]/[ ]/[ ] (month /year)
1013.	What do you think your HIV status is today?	1. HIV-negative 2. HIV-positive 88. Don't know 99. Decline to answer
1014.	How satisfied were you with the quality of services provided at the place where you got the last test? <b>READ ANSWERS, RECORD ONLY ONE</b>	1. Very satisfied 2. Satisfied 3. A little satisfied 4. Not satisfied 88. Don't know 99. Decline to answer
1015.	At any time during your most recent counselling and testing experience, did you reveal to the counsellor or health care provider that you have sex with men?	1. Yes 2. No 88. Don't know 99. Decline to answer

1016.	Why did you NOT tell the counsellor or health care provider that you have sex with men? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Afraid provider would discriminate/ not provide testing 2. Afraid provider would tell police/legal authorities 3. Did not feel it was necessary to discuss 4. Afraid provider would not keep my information confidential 5. Little or no contact/interaction with counsellor or provider 6. Shy/embarassed 7. Provider already knew 8. Other (specify): 88. Don't know 99. Decline to answer
1017.	Did you feel that the counsellor or health care provider reacted to you in a negative or discriminatory way because you have sex with men?	1. Yes 2. No 88. Don't know 99. Decline to answer
1018.	What did the counsellor do to make you feel that way? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Was very uncomfortable discussing 2. Stopped talking to me 3. Asked me to leave 4. Verbally abused or scolded me 5. Other (specify): 88. Don't know 99. Decline to answer
1019.	If someone in your community has a sexually transmitted infection, where can they get a confidential advice and treatment? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Ayurvedic physician 2. Pharmacy 3. Private clinic 4. Government clinic - STD clinic 5. Other Government clinic/hospital 88. Don't know 99. Decline to answer

<b>Section 11: Stigma, discrimination and violence</b>	
<b>INTERVIEWER SAY: Now I will ask you some questions about discrimination and violence. While some people may have experienced these, others may not. Please remember your answers will be kept private.</b>	
1101.	In the past 12 months, have you been refused health care because someone believed you are a beach boy / have sex with tourists? 1. Yes 2. No 88. Don't know 99. Decline to answer
1102.	In the past 12 months, have you been refused police assistance because someone believed you are a beach boy / have sex with tourists? 1. Yes 2. No 88. Don't know 99. Decline to answer
1103.	In the past 12 months, have you had verbal insults directed at you because someone believed you are a beach boy / have sex with tourists? 1. Yes 2. No 88. Don't know 99. Decline to answer
1104.	In the past 12 months, have you been hit, kicked, or beaten because someone believed you are a beach boy / have sex with tourists? 1. Yes 2. No 88. Don't know 99. Decline to answer
1105.	In the past 12 months, did anyone force you to have sex with them by sexually assaulting or raping you? 1. Yes 2. No 88. Don't know 99. Decline to answer

1106.	Who was the person who last forced you to have sex with them? <b>DO NOT READ ANSWERS, RECORD ONLY ONE</b>	1. Do not know the person 2. Social acquaintance 3. Family/relative 4. Police 5. Client 6. Other sex worker 7. Pimp 8. Non-paying partner or boyfriend 9. Other (specify) 88. Don't know 99. Decline to answer
1107.	Did you seek medical treatment after this happened?	1. Yes 2. No 88. Don't know 99. Decline to answer
1108.	Did you report this incident to the police?	1. Yes 2. No 88. Don't know 99. Decline to answer
<b>Section 12: Healthcare utilization</b>		
<b>INTERVIEWER SAY: Now I am going to ask you some questions about your experience with the health care system.</b>		
1201.	During the last 12 months have you sought medical care for any reason?	1. Yes 2. No 88. Don't know 99. Decline to answer
1202.	In the past 12 months, have you had difficulty getting medical care when you sought it?	1. Yes 2. No 88. Don't know 99. Decline to answer

1203.	What difficulty did you have? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	<ol style="list-style-type: none"> <li>1. Too expensive</li> <li>2. Too far away</li> <li>3. Could not take time from work</li> <li>4. Long waiting times</li> <li>5. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
<b>Section 13: Program coverage</b>		
<b>INTERVIEWER SAY: Now I am going to ask you some questions about your experience with social programs.</b>		
1301.	In the last 6 months, have you been in contact with a health peer educator in the community?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1302.	In the last 6 months, how many times have you been in contact with the peer educator? <b>if don't know 888, 999 if declined to answer</b>	<p>[ ] [ ] [ ] (number of times)</p> <ol style="list-style-type: none"> <li>888. Don't know</li> <li>999. Decline to answer</li> </ol>
1303.	What services or information did you receive from the peer educator? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	<ol style="list-style-type: none"> <li>1. General HIV/STI prevention/transmission information</li> <li>2. Condoms</li> <li>3. Referral for STI treatment</li> <li>4. Referral for VCT</li> <li>5. Medical visit</li> <li>6. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

<b>Section 14: Alcohol and Drug use</b>		
<b>INTERVIEWER SAY: Now, I would like to ask some questions about your alcohol and drug use.</b>		
1401.	Have you ever had a drink containing alcohol?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1402.	During the past 4 weeks, how often have you had a drink containing alcohol?	<ol style="list-style-type: none"> <li>1. I never drink alcohol</li> <li>2. At least once a week</li> <li>3. Less than once a week</li> <li>4. Never in the last 4 weeks</li> <li>5. Every day</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
<b>INTERVIEWER SAY: Some people have tried a range of different types of drugs. How often have you used the following drugs in the past 12 months?</b>		
1403.	HAVE RESPONDENT ANSWER FOR EACH SEPARATELY	FREQUENCY TABLE
	<ol style="list-style-type: none"> <li>A. Heroine</li> <li>B. Cannabis</li> <li>C. Cocaine</li> <li>D. Ecstasy</li> <li>E. Amphetamines</li> <li>F. Opium</li> <li>G. Hashish</li> <li>H. Other (specify)</li> </ol>	<ol style="list-style-type: none"> <li>1. Did not use this drug in the last 12 month</li> <li>2. Monthly or less</li> <li>3. Several times a month</li> <li>4. Two to four times a month</li> <li>5. Two to three times a week</li> <li>6. Four or more times a week</li> <li>7. Have never used</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

1404.	Some people have tried injecting drugs using a syringe or needle. In the past 12 <b>months</b> , have you injected drugs?	1. Yes 2. No 88. Don't know 99. Decline to answer
1405.	In the last 12 <b>months</b> , how frequently did you inject drugs?	1. Monthly or less 2. Two to four times a month 3. Two to three times a week 4. Four or more times a week 88. Don't know 99. Decline to answer
1406.	What drug do you normally inject?	1. Heroin 2. Meth 3. Speedball (heroin plus cocaine) 4. Other (specify): 88. Don't know 99. Decline to answer
1407.	How long after you started taking drugs did you start injecting? (write number and the word months or years?) write 88 if don't know, 99 if declined to answer	# Years__ Plus # Months__ 88. Don't know 99. Decline to answer
1408.	In the last 6 months, have you shared a syringe or needle with anyone else when injecting drugs?	1. Yes 2. No 88. Don't know 99. Decline to answer

Section 15: Programme Planning		
INTERVIEWER SAY: Just a couple more questions! Now I am going to ask you some questions related to planning programmes and interventions for beach boys.		
1501.	How often in the past month did you listen to the radio?	1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer
1502.	Which radio stations do you mostly listen to? <b>write 88 if don't know, 99 if declined to answer</b>	1. _____ 88. Don't know 99. Decline to answer
1503.	How often in the past month did you watch TV?	1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer
1504.	Which TV stations do you mostly watch? write 88 if don't know, 99 if declined to answer	1. _____ 88. Don't know 99. Decline to answer
1505.	How often in the past month did you read the newspaper?	1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer

1506.	Which newspapers do you mostly read?	1. _____ 88. Don't know 99. Decline to answer
1507.	How often did you surf the internet in the past month?	1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer
1508.	Which sites do you mostly visit?	1. _____ 2. _____ 88. Don't know 99. Decline to answer
1509.	How often do you use the internet to search for sexual partners?	1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer
1510.	Do you have a mobile phone?	1. Yes 2. No 99. Decline to answer
1511.	Do you use this mobile phone to communicate with other Beach Boys?	1. Yes 2. No 99. Decline to answer

1512.	Would you be interested in receiving text messages on your mobile phone, with health and HIV related information?	1. Yes 2. No 99. Decline to answer
1513.	Would you attend group learning activities if they were offered?	1. Yes 2. No 99. Decline to answer
RE-ENTER THE PARTICIPANT'S COUPON NUMBER		Coupon Code _____
RE-ENTER THE PARTICIPANT'S RDS NUMBER		RDS _____
<b>INTERVIEWER SAY: That is the end. Thank you so much for your time. I will take you now to the nurse.</b>		





204.	What is your citizenship?	1. Sri Lankan 2. Other (specify): 99. Decline to answer
205.	What country were you born in?	1. Sri Lanka 2. Other (specify) 99. Decline to answer
206.	In which district have you mostly lived in the past one year?	1. Colombo 2. Kandy 3. Galle 4. Kalutara 5. Anuradhapura 6. Other (specify) 99. Decline to answer
207.	What language(s) do you speak most commonly at home?	1. Sinhalese 2. Tamil 3. English 4. Other (specify):
208.	What is the highest level of education you completed?	1. Never attended school 2. Grade 1 - 5 3. Grade 6 - 10 4. Passed O/L 5. Passed A/L 6. Completed diploma 7. Completed degree 8. Other (specify): 99. Decline to answer
209.	Can you read and write?	1. Yes 2. No 3. Don't know 4. Decline to answer

210.	Are you currently a student or enrolled as a learner?	1. Yes 2. No
210b.	If yes, currently enrolled as a learner, with what type of institution are you enrolled?	1. University 2. Technical College 3. Vocational School 4. Other (specify):
211.	What is your ethnicity? DO NOT READ ANSWERS, RECORD ONLY ONE	1. Sinhalese 2. Sri Lankan Tamil 3. Indian Tamil 4. Moor 5. Bherger 6. Malay 7. Other (specify): 99. Decline to answer
212.	What is your overall <b>monthly</b> personal income?	1. Less than 5,000 Rupees 2. 5,000 - 10,000 3. 10,001 - 20,000 4. 20,001 - 30,000 5. 30,001 - 40,000 6. > 40,001 88. Don't know 99. Decline to answer
213.	Including yourself, how many people depend on this income?	[ ] [ ] 99. Decline to answer
214.	How long have you lived in [place of interview]? In years	[ ] [ ] (number of years) [ ] [ ] (and number of months) 88. Don't know 99. Decline to answer

215.	Is [insert study location] your primary residence?	1. Yes 2. No 88. Don't know 99. Decline to answer
216.	If your primary residence is not in _____ where is your primary residence? ASK FOR CITY   Write 99 if declined to answer	1. 99. Decline to answer
217.	What is your occupation? <b>DO NOT READ ANSWERS, RECORD ONLY ONE</b>	1. Street vendor/casual labourer 2. Factory worker 3. Professional/banker/accountant 4. Teacher 5. Business owner 6. Hairdresser/beautician/masseuse 7. Waitress/bartender/hotel employee 8. Musician/dancer/performer 9. Tourism/travel agent/tour guide 10. Government worker 11. Security guard 12. Fisherman/seafarer 13. Farmer/agriculture worker 14. Taxi driver / Three wheeler driver 15. Other (specify): 88. Don't know 99. Decline to answer

Section 3: Marriage and Family		
301.	What is your current marital status? <b>READ ANSWERS, RECORD ONLY ONE</b>	1. Single (never married) 2. Living together, but not married 3. Married 4. Divorced / Separated 5. Widowed 99. Decline to answer
302.	Who do you currently live with? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Husband / Wife 2. Other sexual partner 3. Parents 4. Siblings 5. Children 6. Other family/relatives 7. Friend or roommate (not sexual partner) 8. Live alone 9. Co-workers 10. Other (specify): 99. Decline to answer
303.	How would you describe where you live? <b>RECORD ONLY ONE</b>	1. Temporary shelter 2. Boarding house 3. Parents home 4. My home 5. Lodging 6. On the street 7. Brothel 8. Other (specify) 99. Decline to answer
304.	How many children do you have?	[ ] [ ] [ ] 99. Decline to answer

Section 4: Sexual History	
INTERVIEWER SAY: These next questions are about sexual experiences you may have had. While some people have had a lot of sexual experience, others have not, so questions may or may not apply to you.	
401.	Have you ever had vaginal sex? 1. Yes 2. No 99. Decline to answer
402.	Have you ever had anal sex? 1. Yes 2. No 99. Decline to answer
403.	In the past 12 months (since MONTH/YEAR), how many people have you had either vaginal, oral or anal sex with? Please include males and females, main or casual partners, as well as anyone you gave or received money, goods, or services in exchange for sex. [ ] [ ] [ ] [ ] [ ] [ ] (Number of partners) 888. Don't know 999. Decline to answer
404.	Of all of these partners, how many were men? If you cannot remember the exact number, please give me an estimate. <b>Write 888 if don't know, 999 if refuse to answer</b> [ ] [ ] [ ] [ ] [ ] [ ] (Number of partners) 888. Don't know 999. Decline to answer
405.	Of all of these partners, how many were women? If you cannot remember the exact number, please give me an estimate. <b>Write 888 if don't know, 999 if refuse to answer</b> [ ] [ ] [ ] [ ] [ ] [ ] (Number of partners) 888. Don't know 999. Decline to answer

406.	Have you ever received money, goods or services in exchange for sex? 1. Yes 2. No 3. Don't remember 99. Decline to answer
407.	Have you ever had sex, in order to obtain drugs? 1. Yes 2. No 3. Don't remember 99. Decline to answer
408.	Have you ever given money, goods or services in exchange for sex? 1. Yes 2. No 3. Don't remember 99. Decline to answer
409.	When you had sex with women over the last 12 months, how often did you use condoms? 1. Every time 2. Almost every time 3. Sometimes 4. Never 88. Don't know 99. Decline to answer
410.	When you had sex with men over the last 12 months, how often did you use condoms? 1. Every time 2. Almost every time 3. Sometimes 4. Never 88. Don't know 99. Decline to answer
<b>INTERVIEWER SAY: No we are going to talk about your last sexual partner</b>	
411.	What sex was your last sexual partner? 1. Female 2. Male 4. Other (specify): 99. Decline to answer

412.	What type of partner was your last partner? <b>READ ANSWERS, RECORD ONLY ONE</b>	1. Regular partner 2. Casual partner 3. One-time only 4. Other (specify): 88. Don't know 99. Decline to answer
413.	Did you use a condom with your last sexual partner?	1. Yes 2. No 88. Don't remember 99. Decline to answer
414.	Did you give this partner money, goods or services in exchange for sex?	1. Yes 2. No 88. Don't remember 99. Decline to answer
415.	Did you receive money, goods or services in exchange for sex from this partner?	1. Yes 2. No 88. Don't remember 99. Decline to answer
416.	The last time you had sex with this partner, what did you know or believe this persons HIV status to be?	1. HIV-negative 2. HIV-positive 3. I don't know 99. Decline to answer
417.	Was this partner a person who injects drugs?	1. Yes 2. No 3. I don't know 99. Decline to answer
418.	Have you ever shared needles or syringes with this partner?	1. Yes 2. No 88. Don't remember 99. Decline to answer

Section 5: Condom Awareness and Usage		
INTERVIEWER SAY: For the next several questions I will ask about condom awareness and usage.		
501.	Before today, had you ever heard of a condom? I mean a rubber object that is put on a man's penis before sex.	1. Yes 2. No 88. Don't know 99. Decline to answer
502.	Have you ever used a male condom during sex with any partner?	1. Yes 2. No 88. Don't know 99. Decline to answer
503.	Do you know any place or person from which you can obtain male condoms?	1. Yes 2. No 88. Don't know 99. Decline to answer
504.	Where can you obtain male condoms? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Government clinic - STD clinic 2. Government clinic - Not STD clinic 3. Private clinic 4. Private pharmacy or chemist 5. Traditional healer/herbalist 6. Neighbourhood market/stand 7. Friends 8. Sex partner/s 9. Bar 10. Service station(s) 11. Other (specify): 88. Don't know 99. Decline to answer

505.	Do you usually carry condoms with you?	1. Yes 2. No 88. Don't know 99. Decline to answer
506.	In the last twelve months, have you been given condoms? (e.g. through an outreach service, drop-in centre or sexual health clinic)?	1. Yes 2. No 88. Don't know 99. Decline to answer
507.	How affordable do you find male condoms to be? <b>READ ANSWERS, RECORD ONLY ONE</b>	1. Affordable 2. Somewhat affordable 3. Not affordable 88. Don't know 99. Decline to answer
508.	How easy do is it to obtain male condoms? <b>READ ANSWERS, RECORD ONLY ONE</b>	1. Very easy 2. Somewhat easy 3. Not easy 88. Don't know 99. Decline to answer
509.	Where do you usually get male condoms? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Government clinic - STD clinic 2. Government clinic - Not STD clinic 3. Private clinic 4. Private pharmacy or chemist 5. Traditional healer/herbalist 6. Neighbourhood market/stand 7. Friends 8. Sex partner/s 9. Bar 10. Service station(s) 11. Other (specify): 88. Don't know 99. Decline to answer

Section 6: Lubricant access and use		
INTERVIEWER SAY: Now, I am going to ask you some questions about lubricant access and your use of lubricant.		
601.	Have you ever heard of lubricant?	1. Yes 2. No 88. Don't know 99. Decline to answer
602.	How often do you use lubricant during vaginal or anal sex? <b>READ ANSWERS, RECORD ONLY ONE</b>	1. Always 2. Usually 3. Sometimes 4. Rarely 5. Never 88. Don't know 99. Decline to answer
603.	What type of lubricant do you usually use? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Glycerine 2. Saliva or water 3. Vaseline 4. Baby oil 5. Lotion 6. Other oil 7. Water-based 8. Silicone-based 9. Soap 10. Whatever we get from peer educator(s), don't know what it is 11. Other (specify): 88. Don't know 99. Decline to answer
604.	Would you be interested in using lubricant in the future?	1. Yes 2. No 88. Don't know 99. Decline to answer

<b>Section 7: Sexually Transmitted Infections (STIs)</b>	
<b>INTERVIEWER SAY: Now I am going to ask you some questions about sexually transmitted infections, also known as STIs or STDs. For these questions, we are asking about STIs other than HIV. Please answer to the best of your ability.</b>	
701.	<p>Before today, had ever heard of diseases that can be transmitted sexually?</p> <p>1. Yes 2. No 88. Don't know 99. Decline to answer</p>
702.	<p>Can you describe symptoms of sexually transmitted infections in women? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b></p> <p>1. Abdominal pain 2. Genital discharge 3. Foul smelling discharge 4. Burning pain on urination 5. Genital ulcers or sores 6. Swelling in groin area 7. Itching 8. Other (specify): 88. Don't know 99. Decline to answer</p>
703.	<p>Can you describe symptoms of sexually transmitted infections in men? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b></p> <p>1. Abdominal pain 2. Genital discharge 3. Foul smelling discharge 4. Burning pain on urination 5. Genital ulcers or sores 6. Swelling in groin area 7. Itching 8. Other (specify): 88. Don't know 99. Decline to answer</p>

704.	In the last 12 <b>months</b> , has a doctor or a medical professional told you that you had a sexually transmitted infection?	1. Yes 2. No 88. Don't know 99. Decline to answer
705.	In the last 12 months, have you had a discharge? <b>Males: Discharge from penis or anus, and Females: discharge from vagina</b>	1. Yes 2. No 88. Don't know 99. Decline to answer
706.	When did you last have discharge?	[ ]/[ ] / [ ]/[ ]/[ ] (month /year)
707.	Did you seek treatment for this discharge?	1. Yes 2. No 888. Don't know 999. Decline to answer
708.	Why did you NOT seek treatment?	1. Didn't know where to go for treatment 2. Embarrassed or afraid to seek treatment 3. Could not afford treatment 4. Unable to get transportation 5. Didn't think I needed it 6. Other (specify): 88. Don't know 99. Decline to answer
709.	In the last 12 months, have you had a genital ulcer / sore?	1. Yes 2. No 88. Don't know 99. Decline to answer

710.	When did you last have a sore or ulcer? <b>Enter JAN. 1900 if don't know, enter FEB. 1900 if declined to answer</b>	[ ]/[ ]/[ ]/[ ]/[ ]/[ ] (month /year)
711.	Did you seek treatment for this sore or ulcer?	1. Yes 2. No 88. Don't know 99. Decline to answer
712.	Why did you NOT seek treatment? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Didn't know where to go for treatment 2. Embarrassed or afraid to seek treatment 3. Could not afford treatment 4. Unable to get transportation 5. Didn't think I needed it 6. Other (specify): 88. Don't know 99. Decline to answer
713.	Where did you seek treatment the last time you had discharge, sore or ulcer? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Government clinic - STD clinic 2. Government clinic - Not STD clinic 3. Private clinic 4. Private pharmacy or chemist 5. Traditional healer/herbalist 6. Medicine or herbs from home 7. Other (specify): 88. Don't know

714.	Why did you choose to get treatment from this source/these sources? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Confidentiality 2. Affordability 3. Recommended by friend or acquaintance 4. Quality and/or specialized care given at this place 5. Knows the caregivers 6. Known friendliness of the caregivers 7. Proximity/location 8. Other (specify): 88. Don't know 99. Decline to answer
715.	The last time you received treatment for any symptom of an STI or had a diagnosis for an STI, did you tell the health care provider that you inject drugs?	1. Yes 2. No 88. Don't know 99. Decline to answer
716.	Overall, how satisfied were you with how the health care provider treated you during this last visit? <b>READ ANSWERS, RECORD ONLY ONE</b>	1. Very satisfied 2. Somewhat satisfied 3. Not satisfied 88. Don't know 99. Decline to answer
717.	Is it possible to have an STI without there being a symptom?	1. Yes 2. No 88. Don't know 99. Decline to answer

<b>Section 8: HIV/AIDS knowledge, HIV prevention and testing and counselling</b>	
<b>INTERVIEWER SAY: Now, I am going to ask you some questions about HIV and AIDS.</b>	
801.	<p>Before today, had you ever heard of HIV or the disease called AIDS?</p> <p>1. Yes 2. No 88. Don't know 99. Decline to answer</p>
802.	<p>From which one source of information have you acquired the most thorough understanding of HIV and AIDS?</p> <p>1. School 2. Health services 3. workplace 4. Friends/family 5. Television 6. Newspaper / magazines 7. Posters / billboards 8. Pamphlet . Leaflets 9. Radio 10. NGOs 11. Other (specify): 88. Don't know 99. Decline to answer</p>
803.	<p>Have you ever discussed HIV or AIDS with any sexual partners?</p> <p>1. Yes, all 2. Yes, some 3. No, none 88. Don't know 99. Decline to answer</p>
804.	<p>Have any of those partners ever told you their HIV status?</p> <p>1. Yes, all 2. Yes, some 3. No, none 88. Don't know 99. Decline to answer</p>

805.	Do you know anyone who is infected with HIV or who has died of AIDS?	1. Yes 2. No 88. Don't know 99. Decline to answer
806.	Do you have a close friend or relative who has died of HIV/AIDS?	1. Yes, close relative 2. Yes, close friend 3. No 88. Don't know 99. Decline to answer
807.	How likely do you think it is that you yourself will contract HIV / AIDS? Would you say there is no risk, a small risk, moderate risk, or high risk?	1. No risk 2. Small risk 3. Moderate risk 4. High risk 88. Don't know 99. Decline to answer
808.	Why do you think you are at risk of contracting HIV?	1. Have had many partners 2. Do not always use condoms 3. Have injected drugs 4. Partner has other partners 5. Other (specify): 88. Don't know 99. Decline to answer
809.	Why do you think you are at no or low risk of contracting HIV? <b>Multiple answers possible</b>	1. Trust my partner (s) 2. Always use condoms 3. Other (specify) 88. Don't know 99. Decline to answer



### Knowledge Questions

**INTERVIEWER SAYS: I am now going to ask you some questions about your knowledge and attitudes around HIV and AIDS.**

810.	Can the risk of HIV transmission be reduced by having sex with only one uninfected partner who has no other partners?	1. Yes 2. No 88. Don't know 99. Decline to answer
811.	Can people reduce their chance of getting HIV by using a condom every time they have sex?	1. Yes 2. No 88. Don't know 99. Decline to answer
812.	Can a healthy looking person have HIV?	1. Yes 2. No 88. Don't know 99. Decline to answer
813.	Can people get HIV from mosquito bites?	1. Yes 2. No 88. Don't know 99. Decline to answer
814.	Can a person get HIV by sharing food with a person who has HIV/AIDS?	1. Yes 2. No 88. Don't know 99. Decline to answer
815.	Can a woman who has HIV pass on the disease to her unborn child?	1. Yes 2. No 88. Don't know 99. Decline to answer
816.	Would you be willing to work with a person you knew had HIV?	1. Yes 2. No 88. Don't know 99. Decline to answer

817.	Would you agree to live in the same house with someone you knew had HIV?	1. Yes 2. No 88. Don't know 99. Decline to answer
818.	If a relative of yours became ill, would you be willing to care for home or her in your household?	1. Yes 2. No 88. Don't know 99. Decline to answer
819.	If a student has HIV, but is not sick, should he or she be allowed to continue attending school?	1. Yes 2. No 88. Don't know 99. Decline to answer
820.	If you knew a shopkeeper or food seller had HIV, would you buy food from them?	1. Yes 2. No 88. Don't know 99. Decline to answer
821.	If a member of your family had HIV, would you want it to remain a secret?	1. Yes 2. No 88. Don't know 99. Decline to answer
822.	Have you heard about special antiretroviral drugs that people infected with HIV/AIDS can get from a doctor or nurse to help them live longer?	1. Yes 2. No 88. Don't know 99. Decline to answer



1005.	Why have you not had an HIV test? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	<ul style="list-style-type: none"> <li>1. Don't know where to go</li> <li>2. I always use condoms</li> <li>3. Not at risk of getting HIV</li> <li>4. Didn't have time/too busy</li> <li>5. I trust my partner</li> <li>6. Afraid of knowing I may be HIV-positive</li> <li>7. Lack of confidentiality</li> <li>8. Inconvenient testing location or hours</li> <li>9. No money</li> <li>77. Other (specify):</li> <li>88 Don't know</li> <li>99. Decline to answer</li> </ul>
1006.	What was the date of your last HIV test?	[ ] [ ] / [ ] [ ] [ ] [ ] (month /year) 888. Don't know 999. Decline to answer
1007.	Did you get the result of this HIV test?	<ul style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>

1008.	For what reason(s) did you get this last test?	<ul style="list-style-type: none"> <li>1. Wanted to know my HIV status</li> <li>2. My partner asked me to get tested</li> <li>3. Wanted to start sexual relations with a new partner</li> <li>4. Wanted to get married</li> <li>5. Need for loan/insurance coverage</li> <li>6. Employer requested the test</li> <li>7. I felt sick</li> <li>8. Advised by a health worker</li> <li>9. Advised by a peer educator</li> <li>10. Pregnant</li> <li>77. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
1009.	What was the result of your last HIV test? <b>If you do not feel comfortable, you do not need to answer this question.</b>	<ul style="list-style-type: none"> <li>1. HIV-negative</li> <li>2. HIV-positive</li> <li>3. Indeterminate</li> <li>4. I didn't get the result</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
1010.	If you didn't get your result, why not?	<ul style="list-style-type: none"> <li>1. I didn't have time/too busy</li> <li>2. I am not infected</li> <li>3. I was too scared</li> <li>4. The testing centre didn't have my result</li> <li>5. Other (specify):</li> <li>6. I did get the result</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ul>
1011.	When was your first HIV-positive test?	[ ] [ ] / [ ] [ ] [ ] [ ] (month /year) 888. Don't know 999. Decline to answer

1012.	When was your last HIV-negative test?	[ ] [ ] / [ ] [ ] [ ] [ ] [ ] [ ] (month /year) 1. No prior HIV-negative test 888. Don't know 999. Decline to answer
1013.	What do you think your HIV status is today?	1. HIV-negative 2. HIV-positive 88. Don't know 99. Decline to answer
1014.	How satisfied were you with the quality of services provided at the place where you got the last test? <b>READ ANSWERS, RECORD ONLY ONE</b>	1. Very satisfied 2. Satisfied 3. A little satisfied 4. Not satisfied 88. Don't know 99. Decline to answer
1015.	At any time during your most recent counselling and testing experience, did you reveal to the counsellor or health care provider that you inject drugs?	1. Yes 2. No 88. Don't know 99. Decline to answer

1016.	Why did you NOT tell the counsellor or health care provider that you inject drugs? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Afraid provider would discriminate/ not provide testing 2. Afraid provider would tell police/legal authorities 3. Did not feel it was necessary to discuss 4. Afraid provider would not keep my information confidential 5. Little or no contact/interaction with counsellor or provider 6. Shy/embarassed 7. Provider already knew 8. Other (specify): 88. Don't know 99. Decline to answer
1017.	Did you feel that the counsellor or health care provider reacted to you in a negative or discriminatory way because you inject drugs?	1. Yes 2. No 88. Don't know 99. Decline to answer
1018.	What did the counsellor do to make you feel that way? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Was very uncomfortable discussing 2. Stopped talking to me 3. Asked me to leave 4. Verbally abused or scolded me 5. Other (specify): 88. Don't know 99. Decline to answer

1019.	If someone in your community has a sexually transmitted infection, where can they get confidential advice and treatment? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	1. Ayurvedic physician 2. Pharmacy 3. Private clinic 4. Government clinic - STD clinic 5. Other Government clinic/hospital 88. Don't know 99. Decline to answer
<b>Section 11: Stigma, discrimination and violence</b>		
<b>INTERVIEWER SAY: Now I will ask you some questions about discrimination and violence. While some people may have experienced these, others may not. Please remember your answers will be kept private.</b>		
1101.	In the past <b>12 months</b> , have you been refused health care because someone believed you inject drugs?	1. Yes 2. No 88. Don't know 99. Decline to answer
1102.	In the past 12 months, have you been refused <b>police assistance</b> because someone believed you have inject?	1. Yes 2. No 88. Don't know 99. Decline to answer
1103.	In the past <b>12 months</b> , have you had <b>verbal insults</b> directed at you because someone believed you inject drugs?	1. Yes 2. No 88. Don't know 99. Decline to answer
1104.	In the past 12 months, have you been <b>hit, kicked</b> , or beaten because someone believed you inject drugs?	1. Yes 2. No 88. Don't know 99. Decline to answer

1105.	In the past <b>12 months</b> , did anyone force you to have sex with them by <b>sexually assaulting or raping you?</b>	1. Yes 2. No 88. Don't know 99. Decline to answer
1106.	Who was the person who last forced you to have sex with them? DO NOT READ ANSWERS, RECORD ONLY ONE	1. Do not know the person 2. Social acquaintance 3. Family/relative 5. Client 6. Sex worker 7. Pimp 8. Sexual partner 9. Other (specify) 88. Don't know 99. Decline to answer
1107.	Did you seek medical treatment after this happened?	1. Yes 2. No 88. Don't know 99. Decline to answer
1108.	Did you report this incident to the police?	1. Yes 2. No 88. Don't know 99. Decline to answer

<b>Section 12: Healthcare utilization</b>	
<b>INTERVIEWER SAY: Now I am going to ask you some questions about your experience with the health care system.</b>	
1201.	During the last 12 months have you sought medical care for any reason? 1. Yes 2. No 88. Don't know 99. Decline to answer
1202.	In the past <b>12 months</b> , have you had difficulty getting medical care when you sought it? 1. Yes 2. No 88. Don't know 99. Decline to answer
1203.	What difficulty did you have? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b> 1. Too expensive 2. Too far away 3. Could not take time from work 4. Long waiting times 5. Other (specify): 88. Don't know 99. Decline to answer
<b>Section 13: Program coverage</b>	
<b>INTERVIEWER SAY: Now I am going to ask you some questions about your experience with social programs.</b>	
1301.	In the last 6 months, have you been in contact with a health peer educator in the community? 1. Yes 2. No 88. Don't know 99. Decline to answer
1302.	In the last 6 months, how many times have you been in contact with the peer educator? <b>If don't know 888, 999 if declined to answer</b> [ ] [ ] [ ] (number of times) 888. Don't know 999. Decline to answer

1303.	What services or information did you receive from the peer educator? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b> 1. General HIV/STI prevention/transmission information 2. Condoms 3. Referral for STI treatment 4. Referral for VCT 5. Medical visit 6. Other (specify): 88. Don't know 99. Decline to answer
<b>Section 14: Alcohol and Drug use</b>	
<b>INTERVIEWER SAY: Now, I would like to ask some questions about your alcohol and drug use.</b>	
1401.	Have you ever had a drink containing alcohol? 1. Yes 2. No 88. Don't know 99. Decline to answer
1402.	During the past 4 weeks, how often have you had a drink containing alcohol? <b>DO NOT READ ANSWERS, RECORD ONLY ONE</b> 1. I never drink alcohol 2. At least once a week 3. Less than once a week 4. Never in the last 4 weeks 5. Every day 88. Don't know 99. Decline to answer

1403.	How old were you when you first used non-prescribed / illicit drugs? (injecting or non-injecting) <b>Ask participant to estimate best answer   Write 888 if don't know, 999 if refuse to answer</b>	[ ] [ ] (age in completed years) 888. Don't remember 999. Decline to answer
1404.	How long have you been using non-prescribed / illicit drugs? (injecting or non-injecting)	[ ] [ ] (number of years) [ ] [ ] (number of months) RECORD 00 IF LESS THAN 1 MONTH 888. Don't know 999. Decline to answer
1405.	How old were you when you first injected non-prescribed/illicit drugs? (Including self-injection or injection by another). <b>Ask participant to estimate best answer   Write 888 if don't know, 999 if refuse to answer</b>	[ ] [ ] (age in completed years) 888. Don't know 999. Decline to answer
1406.	How long have you been injecting non-prescribed / illicit drugs? (injecting or non-injecting) in years?	[ ] [ ] (number of years) [ ] [ ] (number of months) RECORD 00 IF LESS THAN 1 MONTH 888. Don't know 999. Decline to answer
1407.	In the past 12 months, how frequently did you inject drugs? <b>READ ANSWERS, RECORD ONLY ONE</b>	1. Monthly or less 2. Two to four times a month 3. Two to three times a week 4. Four or more times a week 88. Don't know 99. Decline to answer

1408.	How often have you used the following drugs in the past 12 months? <b>NOTE: IF NOT USED ANY DRUGS NOT ELIGIBLE TO BE IN STUDY - DISCONTINUE INTERVIEW, SEE FTL FOR ADVICE HAVE RESPONDENT ANSWER FOR EACH SEPARATELY</b>	Frequency Table
	A. Heroin	1. Did not use this drug in the last 12 months 2. Monthly or less 3. Several times a month 4. Two to four times a month 5. Two to three times a week 6. Four or more times a week 88. Don't know 99. Decline to answer
	B. Canabis	
	C. Cocaine	
	D. Ecstasy	
	E. Amphetamines	
	F. Opium	
	G. Hashish	
	H. Other (specify)	
1409.	In the past 12 months, how have you taken this drug? <b>Have respondent answer each separately</b>	
	A. Heroin	1. Smoke
	B. Canabis	2. Swallow/inject
	C. Cocaine	3. Snort/sniff
	D. Ecstasy	4. Inject
	E. Amphetamines	88. Don't know
	F. Opium	99. Decline to answer
	G. Hashish	
	H. Other (specify)	

1410.	Which non-prescribed / illicit drugs do you inject most often? <b>RECORD ALL MENTIONED</b>	1. Heroin 2. Cocaine 3. Churus / Ash 3. Methamphetamine 4. Ganja Mal 5. Kerala Ganja 6. Ganja 7. Sudol (Tablet) 8. Rifernol (Tablet) 9. Other (specify): 10. Other (specify): 88. Don't know 99. Decline to answer
1411.	What are the two most common locations or buildings where you get these drugs? <b>Select the first two answers mentioned by the respondent, read answers only if respondent cannot answer spontaneously</b>	1. My house 2. The house of another person who injects 3. The house of a drug dealer 4. An abandoned building 5. Public restroom 6. Prison 7. Street/park/beach 8. Shop/café/bar 9. Workplace 10. Other (specify): 88. Don't know 99. Decline to answer

1412.	Which are the two most common locations or buildings where you usually inject drugs? <b>Select the first two answers mentioned by the respondent, read answers only if respondent cannot answer spontaneously</b>	1. My house 2. The house of another person who injects 3. The house of a drug dealer 4. An abandoned building 5. Public restroom 6. Prison 7. Street/park/beach 8. Shop/café/bar 9. Workplace 10. Other (specify): 88. Don't know 99. Decline to answer
1413.	Do you ever share needles and syringes with others?	1. Yes 2. No 88. Don't know 99. Decline to answer
1414.	When you use needles/syringes that had previously been used by others, how often do you clean it first? <b>READ ANSWERS, RECORD ONLY ONE</b>	1. Every time 2. Most of the time 3. Sometimes 4. Rarely 5. Never 88. Don't know 99. Decline to answer



1415.	What do you usually use to clean the needle/syringe? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	<ol style="list-style-type: none"> <li>1. Cold water</li> <li>2. Hot water</li> <li>3. Soap</li> <li>3. Saliva</li> <li>4. Urine</li> <li>5. Soda/soft drinks</li> <li>6. Alcohol</li> <li>7. Bleach</li> <li>8. Cotton</li> <li>9. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1416.	Can you get a new, unused needle and syringe any time you need one?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>3. Have not tried</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1417.	What things make it difficult for you to access clean needles/syringes? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	<ol style="list-style-type: none"> <li>1. Needles/syringes too expensive</li> <li>2. Vendor/needle seller closed or not around</li> <li>3. Preferred size not available</li> <li>4. Vendor ran out/stock out</li> <li>5. Vendor too far away</li> <li>6. Do not know where to get</li> <li>7. No need</li> <li>8. Retailers refuse to sell to me</li> <li>9. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

1418.	Where do you usually get a new, unused needle and syringe when you need one? <b>DO NOT READ ANSWERS, RECORD ONLY ONE</b>	<ol style="list-style-type: none"> <li>1. Pharmacy</li> <li>2. Chemist's shop</li> <li>3. Drug dealer</li> <li>4. Another person who injects</li> <li>5. Health worker</li> <li>6. Drop-in centre</li> <li>7. Family or relative or spouse</li> <li>8. Sex partner</li> <li>9. Friends</li> <li>10. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1419.	When you dispose of a needle/syringe, what do you do with it? <b>DO NOT READ ANSWERS, RECORD ALL MENTIONED</b>	<ol style="list-style-type: none"> <li>1. Give it to the needle exchange</li> <li>2. Pass it onto another person</li> <li>3. Throw it in the trashcan</li> <li>4. Toss it on the ground/in the water</li> <li>5. Bury it</li> <li>6. Destroy it</li> <li>7. Other (specify):</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>
1420.	How many times have you been arrested for injecting drugs or being in possession of drugs? <b>Write 999 if declined to answer</b>	<p>[ ] (number of times)</p> <p>999. Decline to answer</p>
1421.	Have you ever injected drugs while in jail/prison?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>3. Never been to jail/prison</li> <li>88. Don't know</li> <li>99. Decline to answer</li> </ol>

1422.	When you injected drugs in jail/prison, did you share a needle or syringe, or other injecting equipment with others?	1. Yes 2. No 88. Don't know 99. Decline to answer
1423.	Have you ever injected drugs with someone?	1. Yes 2. No 3. Don't Remember 99. Decline to answer
<b>INTERVIEWER SAY: Now I want you to think specifically about the last time you injected drugs with someone. Could you tell me if you did any of the following:</b>		
1424.	A. Injected with a completely new, unused needle/syringe that no one else including you had used B. Injected with a needle/syringe that was used previously by you and no one else C. Used a needle/syringe after someone else had injected with it D. Received an injection from a 'fixer', or injected from a pre-filled syringe E. Injected using a syringe that someone else had squirted drugs into from his/her used syringe F. Injected blood from someone else who had recently injected drugs (flashblood) G. Passed on the needle/syringe to others after you injected with it	1. Yes 2. No 88. Don't know 99. Decline to answer

1425.	Which of the following best describes your relationship to the last person you injected with? <b>DO NOT READ ANSWERS, RECORD ONLY ONE</b>	1. Sex partner 2. Friend or acquaintance 3. Relative 4. Drug dealer 5. Fixer 6. Fellow prisoner 7. Stranger 8. Other (specify): 99. Decline to answer
1426.	What was the HIV status of the last person you injected with?	1. HIV-negative 2. HIV-positive 3. Indeterminate 88. Don't know 99. Decline to answer
1427.	On the last day you injected, how many times did you inject? <b>DO NOT INCLUDE TODAY</b> <b>Write 888 if don't know, write 999 if declined to answer</b>	[ ] (number of times) 888. Don't know 999. Decline to answer
1428.	On the last day you injected, did you share a needle or syringe?	1. Yes 2. No 888. Don't know 999. Decline to answer

Section 15: Blood Safety	
INTERVIEWER SAY: Now I am going to ask you some questions about blood safety.	
1501.	Have you ever donated blood? 1. Yes 2. No 88. Don't know 99. Decline to answer
1502.	When did you last donate blood? <b>READ ANSWERS, RECORD ONLY ONE</b> 1. Less than 6 months ago 2. Within 6-12 months 3. More than 12 months ago 88. Don't know 99. Decline to answer
1503.	Did you receive money for donating blood? 1. Yes 2. No 88. Don't know 99. Decline to answer
1504.	Have you ever had tattooing or body piercing done? 1. Yes 2. No 88. Don't know 99. Decline to answer
1505.	When did you have this done? <b>If more than once, record last occurrence. READ ANSWERS, RECORD ONLY ONE</b> 1. Less than 6 months ago 2. Within 6-12 months 3. More than 12 months ago 88. Don't know 99. Decline to answer
1506.	When you received the tattoo or body piercing, was it done with a new, sterile, unused needle? 1. Yes 2. No 88. Don't know 99. Decline to answer

Section 16: Programme Planning	
INTERVIEWER SAY: Just a couple more questions! Now I am going to ask you some questions related to planning programs and interventions for injecting drug users.	
1601.	How often in the past month did you listen to the radio? 1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer
1602.	Which radio stations do you mostly listen to? <b>write 88 if don't know, 99 if declined to answer</b> 1. _____ 88. Don't know 99. Decline to answer
1603.	How often in the past month did you watch TV? 1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer
1604.	Which TV stations do you mostly watch? <b>write 88 if don't know, 99 if declined to answer</b> 1. _____ 88. Don't know 99. Decline to answer

1605.	How often in the past month did you read the newspaper?	1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer
1606.	Which newspapers do you mostly read?	1. _____ 88. Don't know 99. Decline to answer
1607.	How often in the past month did you surf the internet?	1. Never 2. About once a month 3. About once a week 4. On most days 5. Every day 88. Don't know 99. Decline to answer
1608.	Which sites do you mostly visit?	1. _____ 2. _____ 88. Don't know 99. Decline to answer
1609.	Do you have a mobile phone?	1. Yes 2. No 99. Decline to answer
1610.	Do you use this mobile phone to communicate with other injecting drug users?	1. Yes 2. No 99. Decline to answer

1611.	Would you be interested in receiving text messages on your mobile phone, with health and HIV related information?	1. Yes 2. No 99. Decline to answer
1612.	Would you attend group learning activities if they were offered?	1. Yes 2. No 99. Decline to answer
RE-ENTER THE PARTICIPANT'S COUPON NUMBER		Coupon Code _____
RE-ENTER THE PARTICIPANT'S RDS NUMBER		RDS _____
<b>INTERVIEWER SAY: That is the end. Thank you so much for your time. I will take you now to the nurse.</b>		

## Annex D – Ethical Clearance



### Ethics Review Committee

A SIDCER (Strategic Initiative for Developing Capacity in Ethical Review) recognized ERC

Faculty of Medical Sciences, University of Sri Jayewardenepura  
Gangodawila, Nugegoda, Sri Lanka



#### Chairperson

Dr. C. A. Weerasinghe

Date: 10<sup>th</sup> October 2014

Our ref: 57/14

#### Secretary

Dr. S. Prathapan

ERC meeting date: 25<sup>th</sup> September 2014

Dr. N.D.Kasturiaratchi,  
Management Frontiers (Pvt) Ltd,  
20/74 – 1/1, Fairfield Gardens,  
Colombo 08

#### Committee Members

Dr. P. N. Wickramasinghe

Dr. P.P.E. Perera

Dr. S. Wimalasiri

Dr. V. N. Fernando

Dr. B. Senarathne

Dr. D. Samarasinghe

Dr. M. Kalutunga

Dr. I. Uluwathge

Dr. S. Samarasinghe

Mr. G. V. A. Goonewardene

Dr. C. Nihalige

Prof. N. Sakin

Dr. M. Gamage

Dr. M. Gamage

Dr. S. Pilapitiya

Dear Dr. N.D.Kasturiaratchi,

**Title: Integrated Biological & Behavioural Surveillance (IBBS) survey among key populations at higher risk of HIV in Sri Lanka**  
**Application Number: 57/14**

*Principal Investigator: Dr. N.D.Kasturiaratchi*

*Supervisor/ Co-Investigators: Dr. Shamini Prathapan, Prof.N.Fernando, Dr.Kelsi Kiritma, Mr.Prasantha Abeykoon, Mrs.Pam Baaster, Mrs. Liezel Wolmarans, Mr. Anke van der Kwaak*

Thank you for submitting the above study to the ERC / FMS, USJ. We are pleased to inform you that the ERC, FMS/USJP has granted ethical approval for your project effective from 25<sup>th</sup> September 2014 as per details given below.

Document	Version No	Date of submission
Project proposal	01	31.07.2014
Clarifications		25.09.2014
Study instrument - English	01	31.07.2014
Study instrument – Sinhala	01	31.07.2014
Information sheet – English	01	31.07.2014
Information sheet – Sinhala	01	31.07.2014
Consent form – English	01	31.07.2014
Consent form – Sinhala	01	31.07.2014
Material Transfer agreement	01	31.07.2014

We affirm that none of the proposed study team members were present during the decision making process of the ERC.

Address all correspondence to: Secretary, Ethics Review Committee, Faculty of Medical Sciences,  
University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka,  
Tel.94-11-2758588, Fax 94-11-2811480, [erc.fms.usjp@gmail.com](mailto:erc.fms.usjp@gmail.com)



## Ethics Review Committee

(SIDCER (Strategic Initiative for Developing Capacity in Ethical Review) inaugurated ERC)

Faculty of Medical Sciences, University of Sri Jayewardenepura  
Gangodawila, Nugegoda, Sri Lanka



### Chairperson

Dr. C. A. Wanigatunga

### Secretary

Dr. S. Prabhakar

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Mr. G. V. A. Goonetilleke

Dr. C. Nihalage

Prof. N. Jayin

Dr. ... Ganapathi

Dr. M. Gunawardena

Dr. S. Prabhakar

The approval is valid until one year from the date of sanction. You may make a written request for renewal / extension of the validity, along with the submission of annual status report. Please note that ethical approval would be revoked if any alteration is made to the project without obtaining prior written consent from the ethics review committee.

As the Principal Investigator you are expected to ensure that procedures performed under the project will be conducted in accordance with all relevant national and international policies and regulations that govern research involving human participants.

Please note that this approval is subjected to the following condition:

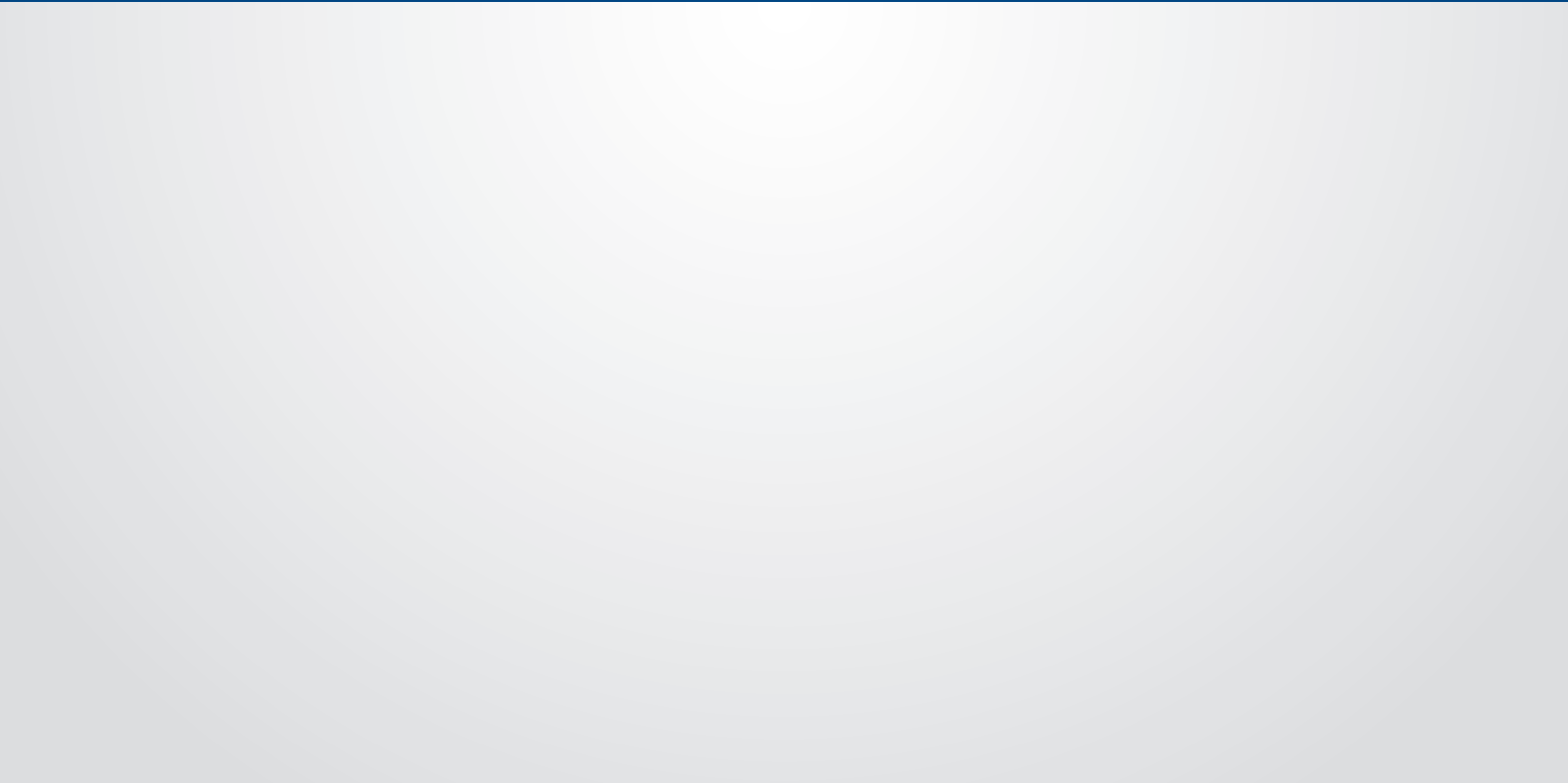
- Progress reports to be submitted at six monthly intervals and at the completion of the study.
- An ERC approved stamped ICFs are attached herewith. Please ensure that the stamped ICF are provided to the participants.
- The final report to be submitted at the completion of the study.
- In the event of any complaints from the participants, please report to the ERC secretary.
- In the events of any protocol amendments, ERC must be informed and the amendments should be highlighted in clear terms as follows:
  - a. The exact alteration/amendment should be specified and indicated where the amendment occurred in the original project. (Page no. etc.)
  - b. If the amendments require a change in the consent form, the copy of revised Consent Form should be submitted to Ethics Committee for approval

Dr. Chandanie Wanigatunga  
Chairperson

Dr. Rasika Perera  
Secretary

Address all correspondence to: Secretary, Ethics Review Committee, Faculty of Medical Sciences,  
University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka.  
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