



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

**REPORT**

**June 2018**



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

REPORT

June 2018



Management Frontiers  
*Libertizing Potentiality*



This report was written by Kelsi A. Kriitmaa with input from Prasantha Abeykoon, Zoran Dominković, Sandra Sevic, Dr. Nimal Kasturiaratchi, Dr. Shamini Prathapan, and Prof. Neluka Fernando.

The Survey and this publication was made possible through financial support from the Global Fund to fight AIDS, TB and Malaria (GFATM) grant for Sri Lanka.

This publication may be freely reproduced or distributed with appropriate acknowledgement. This report contains the analysis of data collected by the IBBS Survey conducted in 2017/18 and does not necessarily represent the decisions or stated policies of the National STD/AIDS Control Programme of Sri Lanka, the Global Fund and other organizations that have provided support to the IBBS Survey.

**Copies of this publication can be obtained from:**

**National STD / AIDS Control Programme (NSACP)**

No. 29, De Sarams Place, Colombo 10, Sri Lanka  
+94 11 533 6873, +94 11 268 2859  
info@aidscontrol.gov.lk  
www.aidscontrol.gov.lk

**Management Frontiers (Pvt) Ltd. (MFL)**

No. 20/74 – 1/1, Fairfield Gardens, Colombo 8, Sri Lanka  
+94 11 2674667/8  
prasanthack@gmail.com  
http://www.managementfrontiers.com

**Published by**

National STD / AIDS Control Programme (NSACP)  
No. 29, De Sarams Place, Colombo 10, Sri Lanka.

**Printed by**

Printel (Pvt) Ltd.  
No. 21/11, Araliya Uyana, Depanama, Pannipitiya, Sri Lanka  
+94 11 2850280

**Suggested citation**

Integrated Biological and Behavioral Surveillance (IBBS) Survey among Key Populations at Higher Risk of HIV in Sri Lanka, 2017/18 – Report, Colombo, National STD/AIDS Control Programme, Management Frontiers (Pvt) Ltd and KIT, 2015

ISBN: XXX

# Consultants

**Consultant Firm:**

Management Frontiers (Pvt) Limited (MFL),  
Colombo, Sri Lanka

**Team of Consultants:**

Team Leader: Dr. Nimal Kasturiaratchi

Project Manager: Prasantha Abeykoon

Senior Technical Advisor: Dr. Kelsi Kriitmaa

Study Coordinator: Dr. Ivana Bozicević

Community Health Specialist: Dr. Shamini Prathapan

Microbiologist: Prof. Neluka Fernando

Social Behavioural Specialist: Prof. Aleksandar Štulhofer

RDS Statisticians: Zoran Dominković, Sandra Sevic, Damir Ivanković, Paul Wesson

Survey Supervisor: Priyanjith Abeykoon

# Acknowledgements

Management Frontiers (Pvt) Ltd (MFL), on behalf of the research team, would like to express their sincere gratitude to the Surveillance Advisory Committee (SAC), medical and Laboratory staff of NSACP, Staff of Global Fund to Fight AIDS, TB and Malaria Project and participated Community Based Organizations (CBOs) for their guidance, support and participation.

## Surveillance Advisory Committee (SAC)

- Dr. Lilani Rajapaksa, Chairperson SAC & Director, National STD/AIDS Control Programme (NSACP) and Consultant Venereologist
- Dr. S. Liyanage, Former Chairperson SAC & Director, National STD/AIDS Control Programme (NSACP)
- Dr. A.P.S Beneragama, Coordinator, Special Surveys - Global Fund Project & Consultant Epidemiologist, NSACP
- Dr. K A M Ariyaratne, Consultant venereologist, NSACP
- Dr. Nalaka Abeygunasekara, Consultant Venereologist, NSACP
- Dr. S. Herath, Consultant Community Physician
- Prof. A. Pathmeswaran, Professor of Community Medicine, Faculty of Medicine, University of Kelaniya
- Dr. Sajeewa Ranaweera, Consultant, Alcohol and Drug Information Centre (ADIC)
- Dr. M. C. Weerasinghe, Senior Lecturer, Faculty of Medicine, Univeristy of Colombo
- Dr. Nalika Gunawardena, NPO/WHO
- Dr. Chathrinie Gajaweera, Medical Officer, Epidemiology Unit, NSACP
- Dr. S Muraliharan, Medical Officer, SIM Unit, NSACP
- Mr. Earnest Perera, Director, Police Hospital, Sri Lanka Police
- Ms. Madu Dissanayake, Project Leader, Family Planning Association of Sri Lanka
- Mr. H.A Lakshman, Executive Director, CSDF
- Mr. Lalith Darmawardena, Director, Heart to Heart

## Medical Staff attached to the NSACP

- Dr. A. Karawita, Consultant Veneriologist, Anuradhapura
- Dr. Sarath Dahanayake, STD Clinic, Kandy
- Dr. Tharani Guruparan, STD Clinic, Jaffna
- Dr. Darshani Wijewickrama, Consultant Veneriologist, Galle
- Dr. S. Ratnayake, STD Clinic, Galle
- Dr. Chithrini Gajaweera, Medical Officer, Surveillance, NSACP
- Dr. S Muralitharan, Medical Officer, NSACP

**Community Based Organizations (CBOs) who assisted in preparation and implementation of the field work**

- Heart to Heart, Colombo
- Abhimani, Colombo
- ADIC, Colombo
- Mithuru Mithuro, Colombo
- Rajarata Gami Pahana, Anuradhapura
- Samadhi Foundation, Galle
- Sathya Guna Foundation, Galle
- Saviya Foundation, Galle
- Journey for Healthy Life, Jaffna
- Laksetha Sahana Sewa, Kandy

# Foreword

## Table of Contents

Forward .....	iv
Table of Contents .....	v
List of Tables .....	vi
List of Figures .....	xiii
Acronyms .....	xiv
EXECUTIVE SUMMARY .....	xvi
1. Introduction .....	1
1.1. Background .....	1
1.2. Previous Studies conducted in Sri Lanka .....	3
1.3. Rationale for the current study .....	5
1.4. Study Objectives .....	5
2. Method .....	6
2.1. Overview of Respondent-Driven Sampling .....	6
2.2. Formative Assessment .....	7
2.3. Study Sites and Sampling .....	8
2.4. Key indicators .....	13
2.5. Data Collection .....	15
2.6. Quality Assurance, Monitoring and Supervision .....	16
2.7. Data Management and Analysis .....	16
2.8. Ethical Considerations .....	17
3. Summary results .....	18
3.1 Female sex workers .....	18
3.2 Men who have sex with men .....	111
3.3 People who inject drugs .....	202
3.4 Beach Boys .....	235
3.5 TGW .....	267
4. Discussion .....	345
5. Conclusions .....	360
6. Study Limitations .....	362
7. Recommendations .....	364

## List of Tables

Table 1: Results of IBBS formative assessment .....	7
Table 2: Districts and key populations to be surveyed .....	9
Table 3: Key indicators used to determine minimum required sample size .....	11
Table 4: Proposed Sample size per key population and district .....	12
Table 5: Homophily analysis .....	18
Table 6: Recruitment information .....	20
Table 7: Network size questions .....	20
Table 8: Biological test results .....	22
Table 9: Citizenship and Residence .....	22
Table 10: Core socio-demographic indicators .....	23
Table 11: Household information and family life .....	24
Table 12: General knowledge about HIV/AIDS .....	25
Table 13: Perception of personal HIV risk .....	26
Table 14: GAM 5.1 Knowledge about HIV prevention .....	26
Table 15: GAM 4.1 Discriminatory attitudes towards PLHIV .....	28
Table 16: HIV testing .....	29
Table 17: Reasons for never receiving an HIV test .....	30
Table 18: General sexual history .....	31
Table 19: Sexual partners in the past 7 days .....	31
Table 20: Sexual partners in the past 30 days .....	32
Table 21: Transactional sex .....	34
Table 22: Last Paying Partner (Client) .....	36
Table 23: Sexual activity with regular (non-paying) partners in the past 30 days .....	37
Table 24: Use of condoms and lubricants .....	38
Table 25: Sexually transmitted infections .....	39
Table 26: Contact with healthcare providers .....	41
Table 27: Use of healthcare services and pregnancy .....	42
Table 28: Coverage of HIV prevention programs .....	43
Table 29: Experiences of Discrimination and Violence on the basis of being a FSW .....	43
Table 30: Alcohol consumption .....	44
Table 31: Use of non-prescribed/illicit drugs .....	45
Table 32: Use of non-prescribed/illicit drugs by injection .....	47
Table 33: Use of non-prescribed/illicit drugs by injection in the past 12 months .....	47
Table 34: Use of media in the past 30 days .....	48
Table 35. Multiplier questions .....	48
Table 36: Homophily analysis .....	50
Table 37: Recruitment information .....	51
Table 38: Network size questions .....	52
Table 39: Biological test results .....	53
Table 40: Citizenship and Residence .....	54
Table 41: Core socio-demographic indicators .....	54
Table 42: Household information and family life .....	56
Table 43: General knowledge about HIV/AIDS .....	57
Table 44: Perception of personal HIV risk .....	58
Table 45: GAM 5.1 Knowledge about HIV prevention .....	58
Table 46: GAM 4.1 Discriminatory attitudes towards PLHIV .....	60
Table 47: HIV testing .....	61
Table 48. Reasons for never receiving an HIV test .....	62
Table 49: General sexual history .....	62
Table 50: Sexual partners in the past 7 days .....	63

Table 51: Sexual partners in the past 30 days .....	64
Table 52: Transactional sex .....	65
Table 53: Last Paying Partner (Client).....	67
Table 54: Sexual activity with regular (non-paying) partners in the past 30 days.....	68
Table 55: Use of condoms and lubricants.....	69
Table 56: Sexually transmitted infections .....	71
Table 57: Contact with healthcare providers .....	72
Table 58: Use of healthcare services and pregnancy .....	73
Table 59: Coverage of HIV prevention programs .....	74
Table 60: Experiences of Discrimination and Violence on the basis of being a FSW.....	74
Table 61: Alcohol consumption .....	75
Table 62: Use of non-prescribed/illicit drugs.....	76
Table 63: Use of non-prescribed/illicit drugs by injection.....	78
Table 64: Use of media in the past 30 days.....	78
Table 65: Multiplier questions.....	79
Table 66: Homophily analysis .....	80
Table 67: Recruitment information .....	82
Table 68: Network size questions.....	82
Table 69: Biological test results .....	84
Table 70: Citizenship and Residence .....	84
Table 71: Core socio-demographic indicators .....	84
Table 72: Household information and family life .....	86
Table 73: General knowledge about HIV/AIDS.....	87
Table 74: Perception of personal HIV risk .....	88
Table 75: GAM 5.1 Knowledge about HIV prevention.....	88
Table 76: GAM 4.1 Discriminatory attitudes towards PLHIV, disaggregated by age .....	90
Table 77: HIV testing.....	91
Table 78: Reasons for never receiving an HIV test .....	92
Table 79: General sexual history .....	93
Table 80: Sexual partners in the past 7 days .....	93
Table 81. Sexual partners in the past 30 days .....	94
Table 82: Transactional sex .....	96
Table 83. Last Paying Partner (Client).....	98
Table 84: Sexual activity with regular (non-paying) partners in the past 30 days.....	99
Table 85: Use of condoms and lubricants.....	100
Table 86: Sexually transmitted infections .....	101
Table 87: Contact with healthcare providers .....	103
Table 88: Use of healthcare services in the past 12 months .....	103
Table 89: Coverage of HIV prevention programs .....	104
Table 90: Experiences of Discrimination and Violence on the basis of being a FSW.....	105
Table 91: Alcohol consumption .....	106
Table 92: Use of non-prescribed/illicit drugs.....	106
Table 93: Use of non-prescribed/illicit drugs by injection.....	109
Table 94: Use of non-prescribed/illicit drugs by injection in the past 12 months.....	109
Table 95: Use of media in the past 30 days.....	109
Table 96: Multiplier questions.....	110
Table 97: Homophily analysis .....	111
Table 98: Recruitment information .....	113
Table 99: Network size questions.....	113
Table 100: Biological test results .....	115
Table 101: Citizenship and Residence .....	115
Table 102: Core socio-demographic indicators .....	116
Table 103: Household information and family life .....	117

Table 104: General knowledge about HIV/AIDS .....	118
Table 105: Perception of personal HIV risk .....	119
Table 106: GAM 5.1 Knowledge about HIV prevention, disaggregated by age .....	120
Table 107: GAM 4.1 Discriminatory attitudes towards PLHIV, disaggregated by age .....	121
Table 108: HIV testing .....	122
Table 109: Reasons for never receiving an HIV test .....	123
Table 110: General sexual history .....	124
Table 111: Sexual partners in the past 7 days .....	124
Table 112: Sexual partners in the past 6 months .....	125
Table 113: Transactional sex .....	126
Table 114: Casual Male Sexual Partners .....	127
Table 115: Regular Male Sexual Partners .....	128
Table 116: Female Sexual Partners .....	130
Table 117: Use of condoms and lubricants .....	131
Table 118: Sexually transmitted infections .....	132
Table 119: Contact with healthcare providers .....	134
Table 120: Use of healthcare services in the past 12 months .....	134
Table 121: Coverage of HIV prevention programs .....	135
Table 122: Experiences of Discrimination and Violence on the basis of being an MSM .....	135
Table 123: Alcohol consumption .....	136
Table 124: Use of non-prescribed/illicit drugs .....	137
Table 125: Use of non-prescribed/illicit drugs by injection .....	139
Table 126: Use of non-prescribed/illicit drugs by injection in the past 12 months .....	139
Table 127: Use of media in the past 30 days .....	140
Table 128: Multiplier questions .....	141
Table 129: Homophily analysis .....	142
Table 130: Recruitment information .....	143
Table 131: Network size questions .....	144
Table 132: Biological test results .....	145
Table 133: Citizenship and Residence .....	145
Table 134: Core socio-demographic indicators .....	146
Table 135: Household information and family life .....	147
Table 136: General knowledge about HIV/AIDS .....	148
Table 137: Perception of personal HIV risk .....	149
Table 138: GAM 5.1 Knowledge about HIV prevention, disaggregated by age .....	150
Table 139: GAM 4.1 Discriminatory attitudes towards PLHIV, disaggregated by age .....	151
Table 140: HIV testing .....	152
Table 141: Reasons for never receiving an HIV test .....	153
Table 142: General sexual history .....	154
Table 143: Sexual partners in the past 7 days .....	154
Table 144: Sexual partners in the past 6 months .....	155
Table 145: Transactional sex .....	156
Table 146: Casual Male Sexual Partners .....	157
Table 147: Regular Male Sexual Partners .....	158
Table 148: Female Sexual Partners .....	159
Table 149: Use of condoms and lubricants .....	160
Table 150: Sexually transmitted infections .....	161
Table 151: Contact with healthcare providers .....	163
Table 152: Use of healthcare services in the past 12 months .....	164
Table 153: Coverage of HIV prevention programs .....	164
Table 154: Experiences of Discrimination and Violence on the basis of being an MSM .....	165
Table 155: Alcohol consumption .....	165
Table 156: Use of non-prescribed/illicit drugs .....	166

Table 157: Use of non-prescribed/illicit drugs by injection .....	168
Table 158: Use of non-prescribed/illicit drugs by injection in the past 12 months.....	168
Table 159: Use of media in the past 30 days .....	169
Table 160: Multiplier questions.....	170
Table 161: Homophily analysis .....	171
Table 162: Recruitment information .....	173
Table 163: Network size questions.....	173
Table 164: Biological test results .....	175
Table 165: Citizenship and Residence .....	175
Table 166: Core socio-demographic indicators .....	175
Table 167: Household information and family life .....	177
Table 168: General knowledge about HIV/AIDS.....	178
Table 169: Perception of personal HIV risk .....	179
Table 170: GAM 5.1 Knowledge about HIV prevention, disaggregated by age.....	179
Table 171: GAM 4.1 Discriminatory attitudes towards PLHIV, disaggregated by age.....	181
Table 172: HIV testing.....	182
Table 173: Reasons for never receiving an HIV test .....	183
Table 174: General sexual history .....	183
Table 175: Sexual partners in the past 7 days .....	184
Table 176: Sexual partners in the past 6 months .....	185
Table 177: Transactional sex .....	187
Table 178: Casual Male Sexual Partners.....	188
Table 179: Regular Male Sexual Partners .....	189
Table 180: Female Sexual Partners.....	190
Table 181: Use of condoms and lubricants.....	191
Table 182: Sexually transmitted infections .....	192
Table 183: Contact with healthcare provider .....	194
Table 184: Use of healthcare services in the past 12 months .....	194
Table 185: Coverage of HIV prevention programs .....	195
Table 186: Experiences of Discrimination and Violence on the basis of being an MSM .....	196
Table 187: Alcohol consumption .....	196
Table 188: Use of non-prescribed/illicit drugs.....	197
Table 189: Use of non-prescribed/illicit drugs by injection .....	199
Table 190: Use of non-prescribed/illicit drugs by injection in the past 12 months.....	199
Table 191: Use of media in the past 30 days .....	200
Table 192: Multiplier questions.....	201
Table 193: Homophily analysis .....	202
Table 194: Recruitment information .....	204
Table 195: Network size questions.....	204
Table 196: Biological test results .....	206
Table 197: Citizenship and Residence .....	206
Table 198: Socio-demographic indicators .....	206
Table 199: Household information and family life .....	208
Table 200: General knowledge about HIV/AIDS.....	209
Table 201: Perception of personal HIV risk .....	210
Table 202: GAM 5.1 Knowledge about HIV prevention.....	211
Table 203: GAM 4.1 Discriminatory attitudes towards PLHIV .....	212
Table 204: HIV testing.....	213
Table 205: Reasons for never receiving an HIV test .....	214
Table 206: Alcohol consumption .....	215
Table 207: Locations where drugs are injected .....	216
Table 208: Length of time injecting non-prescribed/illicit drugs.....	216
Table 209: Use of drugs in the past 12 months .....	217

Table 210: Use of drugs in the past month.....	220
Table 211: Access to clean injecting equipment (needles and syringes).....	220
Table 212: Unsafe injection .....	221
Table 213: Unsafe injection (with others) .....	221
Table 214: Drug-related arrests and incarceration.....	222
Table 215: General sexual history .....	223
Table 216: Sexual partners in the past 12 months .....	224
Table 217: Transactional sex .....	225
Table 218: Last Sexual Partner .....	226
Table 219: Sexual activity with a spouse/regular partner in the past 12 months (among male PWID).....	227
Table 220: Use of condoms and lubricants.....	227
Table 221: Sexually transmitted infections .....	229
Table 222: Contact with healthcare providers .....	230
Table 223: Use of healthcare services in the past 12 months .....	230
Table 224: Coverage of HIV prevention programs .....	231
Table 225: Experiences of discrimination and violence.....	232
Table 226: Blood safety .....	232
Table 227: Use of media in the past 30 days .....	232
Table 228: Multiplier questions.....	233
Table 229: Homophily analysis .....	235
Table 230: Recruitment information .....	237
Table 231: Network size questions.....	237
Table 232: Biological test results .....	239
Table 233: Citizenship and Residence .....	239
Table 234: Core socio-demographic indicators .....	239
Table 235: Household information and family life .....	241
Table 236: General knowledge about HIV/AIDS.....	242
Table 237: Perception of personal HIV risk .....	243
Table 238: GAM 5.1 Knowledge about HIV prevention, disaggregated by age.....	243
Table 239: GAM 4.1 Discriminatory attitudes towards PLHIV, disaggregated by age.....	245
Table 240: HIV testing.....	246
Table 241: Reasons for never receiving an HIV test .....	247
Table 242: General sexual history .....	247
Table 243: Sexual partners in the past 7 days .....	248
Table 244: Sexual partners in the past 12 months .....	249
Table 245: Interactions with tourists.....	250
Table 246: Sexual behaviour with tourists .....	250
Table 247: Sexual behaviour at last sex with a tourist .....	251
Table 248: Transactional sex .....	252
Table 249: Casual Sexual Partners.....	253
Table 250: Regular Sexual Partners .....	255
Table 251: Use of condoms and lubricants.....	256
Table 252: Sexually transmitted infections .....	257
Table 253: Contact with healthcare providers .....	259
Table 254: Use of healthcare services in the past 12 months .....	259
Table 255: Coverage of HIV prevention programs .....	260
Table 256: Experiences of Discrimination and Violence on the basis of being a BB / having sex with tourists .....	261
Table 257: Alcohol consumption .....	261
Table 258: Use of non-prescribed/illicit drugs.....	262
Table 259: Use of non-prescribed/illicit drugs by injection.....	264
Table 260: Use of non-prescribed/illicit drugs by injection in the past 12 months.....	264
Table 261: Use of media in the past 30 days .....	265
Table 262: Multiplier questions.....	266

Table 263: Homophily analysis .....	267
Table 264: Recruitment information .....	269
Table 265: Network size questions.....	270
Table 266: Biological test results .....	271
Table 267: Citizenship and Residence .....	271
Table 268: Core socio-demographic indicators .....	272
Table 269: Household information and family life .....	273
Table 270: General knowledge about HIV/AIDS.....	274
Table 271: Perception of personal HIV risk .....	275
Table 272: GAM 5.1 Knowledge about HIV prevention, disaggregated by age.....	276
Table 273: GAM 4.1 Discriminatory attitudes towards PLHIV, disaggregated by age.....	277
Table 274: HIV testing.....	278
Table 275: Reasons for never receiving an HIV test .....	279
Table 276: General sexual history .....	280
Table 277: Sexual partners in the past 7 days .....	280
Table 278: Male sexual partners in the past 6 months .....	281
Table 279: Transactional sex .....	283
Table 280: Casual Male Sexual Partners.....	283
Table 281: Regular Male Sexual Partners .....	284
Table 282: Female Sexual Partners.....	285
Table 283: Last Sexual Partner .....	286
Table 284: Use of condoms and lubricants.....	286
Table 285: Sexually transmitted infections .....	288
Table 286: Contact with healthcare providers .....	289
Table 287: Use of healthcare services .....	290
Table 288: Coverage of HIV prevention programs .....	291
Table 289: Experiences of discrimination and violence on the basis of being a TGW woman.....	291
Table 290: Alcohol consumption .....	292
Table 291: Use of non-prescribed/illicit drugs.....	292
Table 292: Use of non-prescribed/illicit drugs by injection.....	295
Table 293: Use of non-prescribed/illicit drugs by injection in the past 12 months.....	295
Table 294: Use of media in the past 30 days .....	295
Table 295: Multiplier questions.....	296
Table 296: Homophily analysis .....	298
Table 297: Recruitment information .....	300
Table 298: Network size questions.....	300
Table 299: Biological test results .....	302
Table 300: Citizenship and Residence .....	302
Table 301: Core socio-demographic indicators .....	302
Table 302: Household information and family life .....	304
Table 303: General knowledge about HIV/AIDS.....	305
Table 304: Perception of personal HIV risk .....	306
Table 305: GAM 5.1 Knowledge about HIV prevention, disaggregated by age.....	307
Table 306: GAM 4.1 Discriminatory attitudes towards PLHIV, disaggregated by age.....	308
Table 307: HIV testing.....	309
Table 308: Reasons for never receiving an HIV test .....	310
Table 309: General sexual history .....	310
Table 310: Sexual partners in the past 7 days .....	311
Table 311: Sexual partners in the past 6 months .....	312
Table 312: Transactional sex .....	313
Table 313: Casual Male Sexual Partners.....	314
Table 314: Regular Male Sexual Partners .....	315
Table 315: Female Sexual Partners.....	316

Table 316: Last Sexual Partner .....	316
Table 317: Use of condoms and lubricants.....	317
Table 318: Sexually transmitted infections .....	318
Table 319: Contact with healthcare providers .....	320
Table 320: Use of healthcare services .....	320
Table 321: Coverage of HIV prevention programs .....	321
Table 322: Experiences of discrimination and violence on the basis of being a TGW woman.....	322
Table 323: Alcohol consumption .....	323
Table 324: Use of non-prescribed/illicit drugs.....	323
Table 325: Use of non-prescribed/illicit drugs by injection .....	325
Table 326: Use of non-prescribed/illicit drugs by injection in the past 12 months.....	325
Table 327: Use of media in the past 30 days .....	326
Table 328: Multiplier questions.....	327
Table 329: Summary of GAM and other key indicators amongst FSW.....	351
Table 330: Summary of GAM and other key indicators amongst MSM .....	353
Table 331: Summary of GAM and other key indicators amongst PWID.....	354
Table 332: Summary of GAM and other key indicators amongst BB.....	356
Table 333: Summary of GAM and other key indicators amongst TGW .....	357

## List of Figures

Figure 1: HIV testing algorithm.....	14
Figure 2: Syphilis testing algorithm .....	14
Figure 3: Hepatitis B & C testing algorithm .....	15
Figure 4. Recruitment tree – FSW Colombo .....	19
Figure 5. Recruitment diagnostics – FSW Colombo.....	21
Figure 6. Recruitment tree – FSW Galle .....	51
Figure 7. Recruitment diagnostics – FSW Galle .....	52
Figure 8. Recruitment tree – FSW Kandy.....	81
Figure 9. Recruitment diagnostics – FSW Kandy .....	83
Figure 10. Recruitment tree – MSM Colombo.....	112
Figure 11. Recruitment diagnostics – MSM Colombo .....	114
Figure 12. Recruitment tree – MSM Galle.....	143
Figure 13. Recruitment diagnostics – MSM Galle.....	144
Figure 14. Recruitment tree – MSM Anuradhapura .....	172
Figure 15. Recruitment diagnostics – MSM Anuradhapura.....	174
Figure 16. Recruitment tree – PWID.....	203
Figure 17. Recruitment diagnostics - PWID .....	205
Figure 18. Recruitment tree - BB .....	236
Figure 19. Recruitment diagnostics - BB.....	238
Figure 20. Recruitment tree – TGW Colombo .....	269
Figure 21. Recruitment diagnostics – TGW Colombo .....	270
Figure 22. Recruitment tree – TGW Jaffna .....	299
Figure 23. Recruitment diagnostics – TGW Jaffna .....	301

## Acronyms

AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
AOR	Adjusted Odds Ratio
ART	Antiretroviral Therapy
BB	Beach Boys
BSS	Behavioural Surveillance Survey
CSO	Community Service Organization
DBS	Dried Blood Spot
FG	Focus Group
FPASL	Family Planning Association of Sri Lanka
FSW	Female Sex Workers
FTL	Field Team Leader
GAM	Global AIDS Monitoring
GARPR	Global AIDS Response Progress Reporting
GFATM	Global Fund for AIDS Tuberculosis and Malaria
HIV	Human Immunodeficiency Virus
HSS	HIV Sentinel Sero Surveillance Survey
HTC	HIV Testing and Counselling
IBBS	Integrated Biological and Behavioural Survey
IES	Information, Education and Communication
KII	Key Informant Interview
M&E	Monitoring and Evaluation
MARP	Most-at-Risk Population
MDG	Millennium Development Goal
MF	Management Frontiers
MoH	Ministry of Health
MSM	Men who have Sex with Men
NGO	Non-Governmental Organization
NSACP	National STD/AIDS Control Programme
ODK	Open Data Kit
OR	Odds Ratio
PITC	Provider Initiated Testing and Counselling
PKI	Primary Key Informants
PLHIV	People Living with HIV/AIDS
PSE	Population Size Estimation
PWID	People Who Inject Drugs
RDS	Respondent-Driven Sampling
RDS-A	Respondent-Driven Sampling Analyst
SBCC	Social and Behaviour Change Communication

SSC	Survey Steering Committee
STI	Sexually Transmitted Infection
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
UTC	Unique Testing Code
VCT	Voluntary Counselling and Testing
WHO	World Health Organization
WHO CC	World Health Organization Collaborating Centre for HIV Strategic Information

## EXECUTIVE SUMMARY

### Background

HIV prevalence in Sri Lanka is less than 0.1%, characterized as a low level epidemic, according to the National STD and AIDS Control program (NSACP). Data amongst key populations is required to evaluate and guide national responses, and currently minimal data is available for key populations in Sri Lanka. Two previous surveys, a behavioural surveillance survey undertaken in 2006/7 and an integrated biological surveillance survey (IBBS) in 2014/15, showed low HIV and syphilis prevalence across all key populations with presence of risk behaviour and low knowledge around HIV. The overall aggregate HIV and syphilis prevalence amongst FSW in the 2014/15 survey in Colombo, Galle and Kandy was 0.8% and 0.9%, respectively. The overall aggregate HIV and syphilis prevalence amongst MSM in Colombo, Galle and Anuradhapura in 2014/15 was 0.9% and 2.0%, respectively, showing the highest HIV and syphilis prevalence across all of the groups. Prevalence of HIV and syphilis amongst PWID and BB was zero.

A formative assessment was undertaken in late 2017 indicated respondent driven sampling (RDS) would again be a suitable sampling methodology for this follow up IBBS survey, while also providing information to assist with planning of survey logistics. The objectives of the IBBS survey were to estimate the prevalence of HIV, syphilis, hepatitis C, herpes and associated risk behaviors amongst five key populations in Sri Lanka, namely female sex workers (FSW), men who have sex with men (MSM), people who inject drugs (PWID), beach boys (BB), and transgender women (TG). Furthermore, the survey aimed to assess the use of and access to health and social welfare programs amongst key populations in Sri Lanka and to inform policies and programmes.

### Methods

An IBBS survey among key populations was undertaken in early 2018. A total of n=3,431 key populations members were surveyed, including 1,180 FSW, 1,067 MSM, 305 PWID, 373 BB, and 506 TGW, across Colombo, Galle, Anuradhapura, Kandy and Galle. The number of waves reached ranged between 5 (FSW Kandy) and 12 (MSM Anuradhapura). Participation in the survey was contingent upon meeting eligibility criteria and included a structured interviewer administered questionnaire using electronic data collection via tablets, as well as pre and post-test counseling and rapid HIV, syphilis, hepatitis and herpes (BB only) testing through blood sample collection via intravenous blood draw. Data was analyzed 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.

### Conclusions

Overall, the prevalence of HIV and STIs remains very low across all key population groups in Sri Lanka, however the presence of risk behaviour including inconsistent condom usage, poor HIV health seeking behaviour, and poor knowledge of HIV, combined with poor coverage of HIV prevention programmes, could result in increases in prevalence. As a result, the situation should be closely monitored through routine and sentinel surveillance. Population specific recommendations are elaborated further as follows.

### FSW

Overall HIV and STI prevalence remains low amongst key populations in Sri Lanka. However, an increase in syphilis amongst FSW is noteworthy in Colombo specifically, from 1.6% in 2014/15 to 2.2% in 2018. Behavioral indicators amongst FSW are poor, as was the case in the 2014/15 survey, and in fact have seen little improvement. The only exception is condom usage, which shows more than three quarter of the populations used a condom at last sex with a client; however, it is important to note that this indicator decreased across all sites from 2014/15 to 2018.

## **MSM**

HIV and STI prevalence amongst MSM remains low, and in fact lower than in the previous survey, although the differences are minimal. Only Colombo resulted in any HIV positive MSM cases. While increases in behavioral indicators are noted, overall these indicators are still performing poorly, with MSM exhibiting risk behavior including less than half aware of their HIV status and poor coverage of HIV programmes (approximately a third of the population). On a positive note, condom usage at last anal sex increased from just over half to over three quarters, which is a significant difference.

## **TGW**

TGW were not included in the 2014/5 survey and therefore data is only comparable across districts and an aggregate estimate across the two sites. Overall, HIV and STI prevalence is low among TGW in Sri Lanka (0.48% HIV and 0.24% syphilis), with only a few cases of HIV and Syphilis reported in Colombo, and no cases of Hepatitis. The only well performing behavioural indicator is condom use. Over three quarters of TGW used a condom at last sex, with a noticeable difference between the two sites (over three quarters in Colombo but only a third in Jaffna). Other than condom usage at last sex, all other behavioural indicators show minimal prevention response reaching this population, with just over a third whom know their HIV status and have been reached by HIV prevention programme. Furthermore, discriminatory attitudes are present in a third of the population and nearly half the population avoids HIV services due to discrimination.

## **PWID**

The overall prevalence of HIV and STIs amongst PWID is low, which is no change from the previous round of IBBS survey. Knowledge of HIV status remains unchanged, and the different in coverage of prevention programmes has shown a slight decrease from 4.1% to currently only 2.7% coverage; however this change is legible and should be noted as such. More importantly, the coverage is poor. However, in a positive trend, safe injecting practices have significantly increased, from half the population in 2014/15 to over three quarters in 2018.

## **BB**

The overall prevalence of HIV and STIs amongst BB is 0.2%, which is slightly higher than in 2014/15, but the difference is negligible. Behavioural indicators, however, have increased across the board, including knowledge of HIV status, coverage of prevention programmes, condom use at last sex, and composite knowledge of HIV, showing positive progress.

## **Recommendations**

- i. **Increase condom awareness and usage** across all groups. While condom usage is the best performing GAM indicator across all key populations, much of the population still indicates they do not know where to find a condom. This shows that condom distribution and supply chain mechanisms, using innovative social marketing techniques should be explored.
- ii. **Increase HIV testing**, as HIV testing remains at sub-optimal levels and therefore innovative approaches to increase testing should continue to be explored. Similar to the previous survey's recommendations, alternative testing modalities, including moonlight and mobile testing, and engagement with the private sector, should be explored.
- iii. **Increase participation to address HIV:** Civil society engagement as part of increasing community participation by key populations is crucial, to ensure feedback into design of interventions. Exploration of potential use of Sex Worker Implementation Tool (SWIT), a framework developed by

UNFPA and UNAIDS, is one guideline which provides clear guidance on supporting key populations to develop networks and organizations. Looking to contexts where key populations are well established and leading in the HIV responses for their own populations should be reviewed, for example Kenya.

- iv. **Reduce stigma around key populations and HIV:** An evaluation of HIV campaigns and awareness raising activities may be warranted, to establish reach of these activities, and whether they can be further tailored to the specifics of key populations. Furthermore, while a stigma index survey has been conducted, exploration as to whether the recommendations from this survey, combined with results from the IBBS, could be used to refine and tweak advocacy, and stigma reduction messaging, is recommended.
- v. **Innovate with HIV interventions:** Similar to the previous IBBS finding, the potential for m-health interventions should be explored, given the high ownership of mobile phones amongst all key populations. Depending on whether any health or other innovative interventions have been enacted, they may need to be evaluated. In the dissemination workshop, stakeholders expressed high usage of the internet and dating apps amongst MSM, this finding was not seen in the IBBS survey results, and therefore use of these applications (e.g. Tinder and other apps) should be further explored with qualitative research., to ascertain how risk reduction messaging could be incorporated.
- vi. **Explore comprehensive multi-sectoral programming to reduce risk and generally increase living conditions and quality of life for FSW.** Although most FSW have a source of income other than sex work, the majority (approximately 75%) earn less than 30,000 Sri Lankan Rupees per month (194 USD. According to the World Bank data for 2016, gross national income per capita in Sri Lanka 3,850 USD. Similarly, compared to the general population in Sri Lanka, among which 10.4% in 2011 were living at 5.50 USD per day, the majority of FSW in Kandy are likely living in poverty. In accordance with the UNAIDS and UNFPA Sex Worker Implementation Tool (SWIT), looking at economic opportunities, education, and general quality of life is an important component of FSW programming. Furthermore, in alignment with the Sustainable Development Goals, reduction of poverty is an important goal, and interlinked with health and social development.<sup>1,2,3</sup>
- vii. **Increase general health seeking behaviour:** Health seeking behaviour amongst FSW in general is low, with less than half of FSW in the year preceding the survey seeing medical care. Access to HIV prevention will continue to stagnate if general health seeking behaviour is not addressed. Whether the main challenges are truly stigma, lack of prioritization, or potential financial barriers, this should be explored further.
- viii. **Address sexual violence:** Sexual violence against FSW is prevalent, one in five FSW Colombo and Kandy having been sexually assaulted or raped, while this was much lower in Galle (only 1.2%). Following the sexual assault/rape, few FSW in had sought medical treatment and none reported it to the police. These findings are similar to the IBBS in 2014/5 and therefore outreach, BCC and peer support efforts should consider incorporating, if not already, case management of rape and reporting, or a higher emphasis if already incorporated.
- ix. **Next IBBS survey:** The majority of TGW in the survey had a regular partner and for the majority their partner is a man. It is recommended that further discussion go into whether TGW need to be included as a separate category in the next round of IBBS survey.

## 1. INTRODUCTION

This report describes the planning, implementation, and results of the second round of the national integrated behavioural and biological survey (IBBS) that was conducted among key populations at higher risk of HIV in Sri Lanka in 2017/18. The main objectives of the IBBS included:

- Collect reliable and comparable data on the prevalence of HIV, Syphilis, Hepatitis B, Herpes<sup>1</sup>, and Hepatitis C<sup>2</sup> as well as the associated risk behaviours among Female Sex Workers (FSW), Men who have Sex with Men (MSM), People Who Inject Drugs (PWID), Beach Boys (BB), and Transgender Women (TGW) in Sri Lanka.
- Assess access to and use of health and social welfare programs among FSW, MSM, PWID, BB, and TGW in Sri Lanka.
- Utilize robust methodology that while optimizing available resources enables production of population prevalence estimates through adjustment for unequal probabilities of inclusion, due to varying social network sizes, and the similarities in characteristics of persons within one's social network.
- Use standardized indicators that enable comparison over time and between countries.
- Inform policies, programmes, and interventions aiming to promote the needs and well-being of populations vulnerable to HIV/AIDS in Sri Lanka.

### 1.1. Background

With greater availability of HIV testing and antiretroviral treatment and, consequently, fewer AIDS-related deaths, more people than ever are today living with HIV. Despite progress in treatment and although there is a continuing decline in new infections in most regions of the world, each year as many as 2.5 million people newly acquire HIV. Sustainable Development Goal 3 related to *Good Health and Well-being* aims to end the AIDS epidemic by 2030.

In 2011, at the 65<sup>th</sup> United Nations (UN) General Assembly, 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, MSM and PWID.<sup>3</sup> Commitment to ending the HIV epidemic, pledging to focus on populations at higher risk and to build shared responsibility for achieving targets, were outlined in the 2011 Political Declaration.

In 2014 the Joint United Nations Programme on HIV/AIDS (UNAIDS) launched its ambitious 90/90/90 strategy focusing on treatment, with the objective to end the AIDS epidemic. The strategy indicates that by 2020, 90% of all people living with HIV will know their HIV status, 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy, and 90% of all people receiving antiretroviral

---

<sup>1</sup> Only among BB

<sup>2</sup> Only among PWID

<sup>3</sup> <http://www.un.org/News/Press/docs/2012/ga11254.doc.htm> and [http://www.unaids.org/sites/default/files/sub\\_landing/files/20110610\\_UN\\_A-RES-65-277\\_en.pdf](http://www.unaids.org/sites/default/files/sub_landing/files/20110610_UN_A-RES-65-277_en.pdf)

therapy will have viral suppression. In order for these targets to be achieved, strengthening of surveillance systems, which are sensitive to key populations, is necessary component of a national response.

Sri Lanka is a Democratic Socialist Republic. It is an island 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. It has a population of 21.2 million (2016, mid-year estimation).<sup>4</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. As per the annual report of the National STD and AIDS Control Programme (NSACP), the total reported cumulative cases of HIV, up to 2016, were 2,500. During 2016, a total of 249 HIV cases were newly reported in Sri Lanka. This is the highest number reported in a year, since 1987 when the first case was identified. Overall, this equates to approximately 21 persons diagnosed as HIV positive every month. Nevertheless, these reported numbers represent only a portion of HIV infected people in the country, due to lack of testing and self awareness of HIV status, due to various barriers, including stigma and discrimination. By the end of 2016, the estimated number of people living with HIV (PLHIV) was 3,900. A total of 2,139 have been diagnosed and living at the end of 2016. Out of this population, a total of 1,743 were linked to care and 1,308 were started on ART by the end of 2016.<sup>5</sup>

### **1.1.1. Key Populations**

UNAIDS defines key populations as gay men and other men who have sex with men (MSM), sex workers, transgender people (TG), people who inject drugs (PWID), and prisoners and other incarcerated populations. These populations are defined as such due to vulnerability to HIV and lack of access to services. These populations may also be subject to stigma and discrimination, which may hinder health seeking behaviour and access to information and services. While these are the traditional key populations as outlined by UNAIDS, national responses, through consultative processes, often define the key populations for their context. In the case of Sri Lanka, beach boys (BB) are included in the national strategy as a key population, and therefore also included in national surveillance, including the IBBS surveys.

In Sri Lanka, punitive legal and policy environments and subsequent high levels of stigma and discrimination towards people living with HIV and key communities present a major barrier to Sri Lanka's AIDS response. Both sex work and sexual relations between men are prohibited by national laws, codes and/or policies. National surveys suggest that many people at higher risk of infection delay testing for HIV and coming forward for treatment because they are concerned by the implications of their identification and testing HIV-positive, and the confidentiality of their HIV status.

#### **1.1.1.1. Female Sex Workers (FSW)**

According to a 2013 national population size estimation (PSE) survey, there are approximately 14,132 female sex workers (FSWs) in Sri Lanka. More than half (52%) are operating in the Western province, while two-thirds (66%) operate in Western, Central and Southern provinces. The IBBS Survey in 2014/15 reported the HIV prevalence among FSWs in Colombo (in Western province) and Galle (Southern province)

---

<sup>4</sup>[http://databank.worldbank.org/data/views/reports/reportwidget.aspx?Report\\_Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=LKA](http://databank.worldbank.org/data/views/reports/reportwidget.aspx?Report_Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=LKA)

<sup>5</sup> National STD/AIDS Control Program, Sri Lanka, Annual Report 2016:

[http://www.aidscontrol.gov.lk/images/pdfs/publications/Annual-report-2016-online-version\\_1.pdf](http://www.aidscontrol.gov.lk/images/pdfs/publications/Annual-report-2016-online-version_1.pdf)

to be 1%, while the prevalence in Kandy (Central province) as 0%<sup>6</sup>. The prevalence, however, has increased over the past years as the rate reported in 2003-2004 was only 0.2%.<sup>7</sup>

#### **1.1.1.2. Men who have Sex with Men (MSM)**

As per the PSE Survey in 2013, there are approximately 7,551 MSMs in Sri Lanka and about 65% are operating the Western province, while 75% operate in Western, North Central and Southern provinces. The IBBS Survey in 2014/15 reported the HIV prevalence among MSMs in Colombo (in Western province) is 1.4%, prevalence in Galle (Southern province) is 0.4% while the prevalence in Anuradhapura (North Central Province) is Zero<sup>8</sup>.

#### **1.1.1.3. People Who Inject Drugs (PWID)**

The 2013 PSE survey estimated that there were 17,459 drug users, 423 injecting drug users (PWID) and 210 injecting drug users who share needles. About 60% of injecting drug users (256 of 423) were reported in the Western province. The IBBS survey of 2014/15 recruited 326 PWID and reported no HIV or syphilis positivity. Approximately 55% of PWID shared needles in the past, though 90% of them knew where to obtain a clean needle. However, 87% of PWID stated there is no need to use clean needle every time they inject drugs. A study carried out in 2006-2007 among 278 drug users in three prisons in Sri Lanka found that the prevalence of injecting drug use was higher than what has been officially reported (15.8% vs. 1%). In addition, there was a high prevalence of risk-taking sexual behaviour where 30% of respondents reported that they recently had between 2 and 6 partners, and only 7% used condom at last sexual contact.

#### **1.1.1.4. Beach Boys (BB)**

The 2013 PSE exercise estimated 2,001 beach boys during peak periods, while the 2014/15 IBBS estimated 1,000 in Galle district alone. According to the IBSS 2014/15, survey, 99% of beach boys had had vaginal intercourse with a woman and 17% had had anal intercourse with a man in the previous 12 months. The survey further indicated there were no beach boys who were positive for HIV or syphilis.

#### **1.1.1.5. Transgender Women (TGW)**

For the first time transgender women (TGW) are being included in national surveillance efforts, based on anecdotal evidence of a high prevalence of TGW in the North, in Jaffna. Anecdotal evidence suggests this population grew during the war, where young boys would attempt to present themselves as women, to avoid inscription. However, these theories are not based on evidence, and go against scientific theories and rationale relating to sexuality and TGW research in other contexts. Further significant anecdotal evidence suggesting both social and sexual mixing with MSM populations, resulting in inclusion in this survey.

## **1.2. Previous Studies conducted in Sri Lanka**

In addition to the IBBS survey undertaken in 2014/15 and now the 2017/18 IBBS survey, there are other sources of evidence among key populations in Sri Lanka. A behavioural surveillance survey (BSS) was undertaken 2006/2007, however this survey did not include a biological component. In 2009, a national population size estimation (PSE) exercise was undertaken, estimating 14,132 FSW in Sri Lanka (ranging from 12,329 to 15,935) across 3,683 hot spots<sup>7</sup>. Furthermore, data from sentinel surveillance from NSACP

---

<sup>6</sup> IBBS Report – 2014/15, National STD/AIDS Control Programme, Sri Lanka

<sup>7</sup> UNGASS Country Report, 2010 citing National STD/AIDS Control Programme, Sri Lanka

<sup>8</sup> IBBS Report – 2014/15, National STD/AIDS Control Programme, Sri Lanka

STD clinics and the field undertaken since 1993 is available and is used for customized programming with key populations.

### **IBBS 2014/15**

In the 2014/15 IBBS survey 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 key populations surveyed across the 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 included a structured interviewer administered questionnaire using electronic data collection via tablets, as well as pre and post-test counseling and rapid HIV and syphilis testing through blood sample collection via intravenous blood draw. Data was analyzed using RDS Analyst (RDS-A), with univariate, bivariate and multivariate analysis undertaken, as well as comparison with other data sources from previous surveys.

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 did 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 was 0.8% and 0.9%, respectively. While prevalence was low, most behavioural indicators amongst FSW were 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 exhibited comprehensive knowledge around HIV and AIDS (34.9%) and had 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). Despite low behavioural indicators, condom usage was 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 was 0.9% and 2.0%, respectively, showing the highest HIV and syphilis prevalence across all groups. A similar trend was seen amongst MSM as for FSW; prevalence was low, as were most behavioural indicators, with only condom usage at last anal sex showing elevated figures. Just under a third of MSM exhibited comprehensive knowledge around HIV and AIDS (30.7%) and less than a fifth had been tested for HIV in the last 12 months and received their results (15.4%). One fifth (19.5%) had been reached by prevention programmes (19.3%) (GARPR composite indicator, received free condoms and know where an HIV test can be obtained). Just over half (57.9%) of MSM had used a condom at last anal sex.

As PWID were sampled only from one survey site, population estimates were for PWID in Colombo. No HIV or syphilis was detected, resulting in zero percent prevalence. The trend for PWID was 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 had 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, in Galle. No HIV or syphilis was detected, resulting in zero percent prevalence. Similar to FSW and MSM, the trend was same for BB, in that condom usage was 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 had been for an HIV test in the last 12 months and received their result (4.3%) and have reached with prevention programmes (7.8%).

Recommendations from the 2014/15 IBBS focused on increasing condom awareness and usage, including formulation and implementation of a multisectoral national condom policy / strategy, which outlines expansion of condom promotion and distribution through expanded channels, including the potential for private sector collaboration. Additionally, it was recommended that a multi-stage approach to increase HIV testing amongst key populations be implemented, including a review and possible expansion, of the peer educator model, after assessing strengths, weaknesses and areas for improvement, as well as amendments to the social and behavior change communication (SBCC) interventions targeting key populations. Use of documented approaches on key population was recommended, as well as interventions focusing on stigma reduction, including sensitization of key populations, but also religious, political, community leaders and the media. Innovation around with HIV interventions was also suggested, including the potential for m-health interventions. Finally, additional research needs were identified, including review of the peer educator model, review of the BCC packages, and 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.

### 1.3. Rationale for the current study

While a BBS survey was completed in Sri Lanka in 2006/7, this survey did not include a biological component, and therefore no prevalence data was generated. The previous IBBS survey, completed in 2014/5, incorporated both behavioural and biological indicators, and as recommended by global best practice HIV surveillance, these surveys should be repeated approximately every three years. While the surveys require both financial and human resources to undertaken, they are necessary for effective surveillance of epidemics at the national level and analysis of trends.

### 1.4. Study Objectives

Given this was the second round of the national IBBS survey conducted among key populations at higher risk of HIV in Sri Lanka, all efforts were made to maintain the survey design and tools, to ensure the comparability of data over time. The main objectives of the IBBS survey included:

- Collect reliable and comparable data on the **prevalence of HIV, Syphilis, Hepatitis B, Herpes<sup>9</sup>, and Hepatitis C<sup>10</sup>** as well as the associated risk behaviours among FSW, MSM, PWID, BB and TGW in Sri Lanka.
- Assess **access to and use of health and social welfare programmes** among FSW, MSM, PWID, BB, and TGW in Sri Lanka.
- Use robust methodology, while optimizing available resources, to enable production of **population prevalence estimates** through adjustment for unequal probabilities of inclusion due

---

<sup>9</sup> Only among BB

<sup>10</sup> Only among PWID

to varying social network sizes, and the similarities in characteristics of persons within one's social network.

- Use **standardized indicators** that enable comparison over time and between countries.
- **Inform policies, programmes, and interventions** aiming to promote the needs and well being of populations vulnerable to HIV/AIDS in Sri Lanka.

## 2. METHOD

### 2.1. Overview of Respondent-Driven Sampling

Globally, FSW, MSM, PWID and TGW comprise highly stigmatized populations, resulting in difficulty reaching them through conventional population-based survey methods. In response, specialized surveillance methods have been developed to approximate probability-based sampling through mapping venues of key populations concentrations, specifically a method called time-location sampling (TLS) or through peer referrals, through a method called Respondent Driven Sampling (RDS). RDS was chosen as all four key populations are hard to reach and hidden, Furthermore, RDS was the methodology used in the last round of IBBS survey in 2014/5, which will allow comparability of data. Additional statistical justifications for sampling hard to reach populations using RDS are presented below.

The theoretical underpinnings of RDS have been well established in published literature.<sup>11,12</sup> In, 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 peer, and this referral continues. 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, otherwise known as stability with respect to the composition of the sample, is achieved.

Specialized analysis using appropriate software, such as Respondent Driven Sampling Analyst (RDS-A), 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 peers 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). Prior to the launching of the full RDS survey a formative assessment is conducted to assess the feasibility of this methodology.

---

<sup>11</sup> Heckathorn DD. Respondent-driven sampling: A new approach to the survey of hidden populations. Soc Probl. 1997;44:174-199.

<sup>12</sup> Heckathorn DD. Respondent-driven sampling II: Deriving valid population estimates from chain-referral samples of hidden populations. Soc Probl. 2002;49:11-34.

## 2.2. Formative Assessment

The FA for the IBBS was undertaken between October 9th and October 25th, 2017 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 was 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, Anuradhapura and Jaffna). A total of 37 KII and 14 FGD, 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 formative assessment**

District	Key Group and Respondents Sampled (# persons)					
	FSW	MSM	Transgender women	PWID	BB	Total
<b>Colombo</b>	4 (KII) 12 (FGD)	4 (KII) 12 (FGD)	4 (KII) 8 (FGD)	4 (KII) 12 (FGD)	-	60
<b>Kandy</b>	4 (KII) 12 (FGD)	-	-	-	-	16
<b>Galle</b>	4 (KII) 12 (FGD)	4 (KII) 8 (FGD)	-	-	4 (KII) 12 (FGD)	44
<b>Anuradhapura</b>	-	4 (KII) 8 (FGD)	-	-	-	12
<b>Jaffna</b>	-	-	4 (KII) 8 (FGD)	-	-	12
<b>Total</b>	<b>48</b>	<b>40</b>	<b>24</b>	<b>16</b>	<b>16</b>	<b>144</b>

### Summary of Results from the Formative Assessment

Overall, findings showed that IBBS surveys with all five key groups were feasible in the respective districts, a further detailed summary of the findings is presented below.

## 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 IBBS in Sri Lanka. The new group of TG was identified as a separate group in the districts of Colombo and Jaffna for this IBBS Survey. As was identified in the previous IBBS Survey, it is noted amongst the FSW group that no known 'pimps' were revealed to be an integral part of the FSW population, but the use of 'temporary husbands' by FSW for protection was found.

The formative assessment reveals that the districts in which the formative assessment was conducted are feasible for the follow up IBBS survey. It was also revealed that the respective key populations that were targeted were indeed prominent key populations in the districts and the targeted number of respondents (based on sample size calculations) could be achieved. Hence, the selected districts and key populations to be covered in each district are presented below.

## Willingness to participate and methodology

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 would be asked to act as recruiters themselves. General consensus was that a peer recruitment method would work amongst all groups as key populations appear to be highly networked, and therefore respondent driven sampling (RDS) a viable method. Confidentiality was emphasized across all the groups as a key to requirement, to ensure wide participation. The proposed primary incentive of Rs 350.00 and three secondary incentive of Rs 150.00 each (totalling to Rs 450.00) was viewed as a reasonable incentive for all the five groups of key populations. It was also revealed by the formative assessment that the most feasible language for enumeration is Sinhala except in the case of TGs in the district of Jaffna where the enumeration language required would be Tamil.

## Survey logistics

As in the case of previous the IBBS survey, a great deal of information was provided regarding survey logistics for the IBBS survey. 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 key groups in Colombo preferred a location such as YBMA building which was the location in the previous IBBS survey, as they found it be spacious, convenient and safe. The BB group in Galle 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. The TG group in Jaffna preferred an NGO office as the location for the IBBS survey. Opening hours preferences varied across the various respondents and groups, but most groups preferred daytime from 9.00 AM to 6.00 PM. All groups did not seem to mind the use of tablets or smart phones for the use of electronic data collection, nor did they mind sharing a survey site with other key populations.

## 2.3. Study Sites and Sampling

Five locations were selected for inclusion in the formative assessment and subsequently the IBBS survey, including Colombo, Kandy, Anuradhapura, Galle and Jaffna. The breakdown of which key populations were surveyed in each district is described below (Table X). These locations were selected based on multiple factors, including efforts to provide trend analysis with previous surveys and expansion of population groups and sites (e.g. TGW and Jaffna), while balancing limited financial resources. Except for Transgender group in Jaffna, all other districts and key populations are same as those surveyed in the previous IBBS in 2014/15.

**Table 2: Districts and key populations to be surveyed**

Districts	Key Populations Surveyed
Colombo	1. FSW 2. PWID 3. MSM 4. TGW
Kandy	5. FSW
Galle	6. FSW 7. MSM 8. BB
Anuradhapura	9. MSM
Jaffna	10. TGW

### 2.3.1. Eligibility Criteria for Inclusion in the Study

Eligibility criteria were aligned to the IBBS done in 2014/2015 and PSE undertaken in 2013 by the NSACOP and the MoH, as well as UNAIDS and WHO definitions of key populations.

- **FSW:** Any female who has sold sex in exchange of money or goods in the six months before the survey. This includes the following sub-types of FSW: street, lodge/hotel, brothel, home/shanty, karaoke/casino/nightclub, and vehicle based FSW.
- **MSM:** Any man who had anal sex with another man in the six months before the survey, irrespective of sexual orientation. This includes nachchis (effeminate males who have sex with other males) and male sex workers.
- **PWID:** A person who has been injecting drugs for non-medical purposes during the 12 months preceding the study.
- **BB:** Men (homosexual, heterosexual or bisexual) who cruise in and around beach areas and who have had anal and/or vaginal sex with tourists in the 12 months before the survey.
- **TGW:** A person who was assigned to be a male at birth but who self-identifies as a woman/transgender/transwoman and has had penetrative sex with men in the past 12 months.

Additionally, eligibility criteria included the following:

- Older than 18 years of age
- Ability to provide verbal informed consent (e.g. are not under the influence of alcohol or other drugs)
- Reside or work in the area where the IBBS survey is done for at least 12 months before the survey

### 2.3.2. Sample Size Calculation

The sample size calculation followed the guidelines for calculation that aim to test changes in an estimate over time.<sup>13</sup> Given the estimated HIV prevalence is very low across all four target groups in Sri Lanka, using the indicator of HIV prevalence in sample size calculations would yield sample sizes that are excessively large for accurate assessments. Therefore, condom use and safe injection practice indicators appear most feasible for use in the calculations. The sample size calculation used is as follows:

$$n = D \frac{[Z_{1-\alpha} \sqrt{2P(1-P)} + Z_{1-\beta} \sqrt{P_1(1-P_1) + P_2(1-P_2)}]^2}{(P_2 - P_1)^2}$$

Where:

- n = Sample size calculated for the second survey round
- D = Design effect
- $Z_{1-\alpha}$  = The z score for the confidence level
- $Z_{1-\beta}$  = The z score for the power
- $P_1$  = The proportion of the sample reporting indicator baseline
- $P_2$  = The proportion of the sample reporting indicator at round 2
- $P = (P_1 + P_2) / 2$

Based on the sample size calculation with a 95% confidence interval and power at 80% ( $Z_{1-\beta} = 0.83$ ), the following sample size is needed to be achieved for each target group to detect a difference of plus or minus 15%. The sample size calculations for each target group, taking into account a design effect of 2 as recommended in RDS studies, are listed below.<sup>14</sup> Recruitment continued until which point the desired sample size was reached, in addition to attaining equilibrium on key variables. Key indicators used for sample size calculations were derived from the IBBS survey conducted in 2014/15. Key indicators as well the required sample sizes for the four key populations are presented in the table below (Table 3). The total minimum sample size is to be at least 2,757 persons across the four key populations.

---

<sup>13</sup> World Health Organization, Regional Office for the Eastern Mediterranean (2013). Introduction to HIV/AIDS and sexually transmitted infection surveillance: Module 4: Introduction to respondent- driven sampling. Available at [http://applications.emro.who.int/dsaf/EMRPUB\\_2013\\_EN\\_1539.pdf](http://applications.emro.who.int/dsaf/EMRPUB_2013_EN_1539.pdf).

<sup>14</sup> Salganik, 2006

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

	Indicators Considered	IBBS 2014 Estimation (Indicator level at Round 1, $P_1$ )	Sample size ( $N$ ) needed with a design effect of 2.0
1	% FSW used condom consistently with a client during previous 30 days (Colombo)	0.835	442
2	% FSW used condom consistently with a client during previous 30 days (Galle)	0.738	307
3	% FSW used condom consistently with a client during previous 30 days (Kandy)	0.745	341
4	% MSM used condom consistently with non-regular partners during previous six months (Colombo)	0.317	327
5	% MSM used condom consistently with non-regular partners during previous six months (Galle)	0.342	334
6	% MSM used condom consistently with non-regular partners during previous six months (Anuradhapura)	0.506	335
7	% PWID used sterile needle/syringe at last injection (Colombo)	0.507	335
8	% Beach Boys used condom consistently with non-regular partners during previous twelve months (Galle)	0.352	336
	<b>Total Sample Size</b>		<b>2,757*</b>

\* All sample sizes rounded to the closest whole number. Non-response and/or refusals were taken into account in the above sample calculations. An adjustment for up to 10% was expected, thus requiring a total sample size of approximately **3,034**.

Equilibrium 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. Comprehensive formative research and ensuring diversity of selected seeds is a key risk reduction strategy to ensure sufficient waves to reach equilibrium. Each variable may reach equilibrium at different waves of the research, and this balanced with a need to reach the estimated sample size, provides indicators and guidance on when to begin reducing the number of coupons given out (i.e. coupon distribution may be reduced from three, to

two, and then one in the final stages of the research) to eventually close data collection.<sup>15</sup> Homophily is also a key metric analysed, which is 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 (e.g. people are recruiting similar to themselves), and values below 1 mean negative homophily (e.g. people are recruiting different from themselves)

From the table above, it can be seen that the minimum sample size for a key population would have been around 250 (e.g. indicator 6). For RDS, a minimum requirement for sample size per distinct population, also requires a mean minimum sample size of 250 in order to reach equilibrium 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 yielded the following sample size breakdown per population.

The distribution of a proposed sample size for the IBBS survey of approximately **3,350** is displayed in the table below. This distribution takes into the account the estimated population sample sizes (IBBS 2014/15 and PSE 2013 study) per key population and district, and a minimum required sample per key population and district of 250.

**Table 4: Proposed Sample size per key population and district**

District	Key Group and proposed coverage				
	FSW	MSM and Transgender women	PWID	BB	Total
Colombo	450	350 (MSM) 250 (TG)	300	-	1,350
Galle	350	350 (MSM)		350	1,050
Kandy	350	-	-	-	350
Anuradhapura	-	350 (MSM)	-	-	350
Jaffna (Transgender Women)	-	250 (TG)	-	-	250
<b>Required Sample Size</b>	<b>1,150</b>	<b>1,550</b>	<b>300</b>	<b>350</b>	<b>3,350</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>8.1%</b>	<b>20%</b>	<b>71%</b>	<b>26.6%</b>	<b>14%</b>
<b>% of Sample</b>	<b>35%</b>	<b>45%</b>	<b>9%</b>	<b>11%</b>	<b>100%</b>

<sup>15</sup> Equilibrium/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.

Due to very low estimated populations sizes for BB in general, as well as in Colombo and in Kandy, a sample of 350 was proposed in Galle. With an estimated number of beach boys of 444, Galle has the second highest estimate after Ampara (estimate of 453). The population size estimate for PWID in the country is low, therefore it was noted at time of protocol development that reaching a sample of 350 may be challenging.

## 2.4. Key indicators

### 2.4.1. Biological Indicators

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 were used which has the advantage of generating same day results within a short period of time and requiring 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 as there are minimum identifiers (in order not to breach confidentiality). The confidentiality of the respondent was maintained as the HIV counsellor was the only person on site to know respondents' test results. All respondents were referred to the closest NASCP STD Clinic for further evaluation, management and follow up, as needed.

### 2.4.2. Behavioural Questionnaire

A standardized behavioural questionnaire based on the previous IBBS survey from 2014/15 was used, with minor edits. For the baseline survey conducted among TGW, the behavioural questionnaire used for the survey among MSM was amended to include a brief gender transition-related module. Minor edits to the Global AIDS Progress Report Reporting (GARPR) indicators were done in accordance with UNAIDS guidance. The behavioural tool collected data on demographics, behaviours potentially correlated with HIV and STIs, symptoms of STIs, HIV related knowledge, attitudes, practices, and testing, stigma, discrimination and risk perceptions, access and potential barriers to services, and network sizes and community composition.

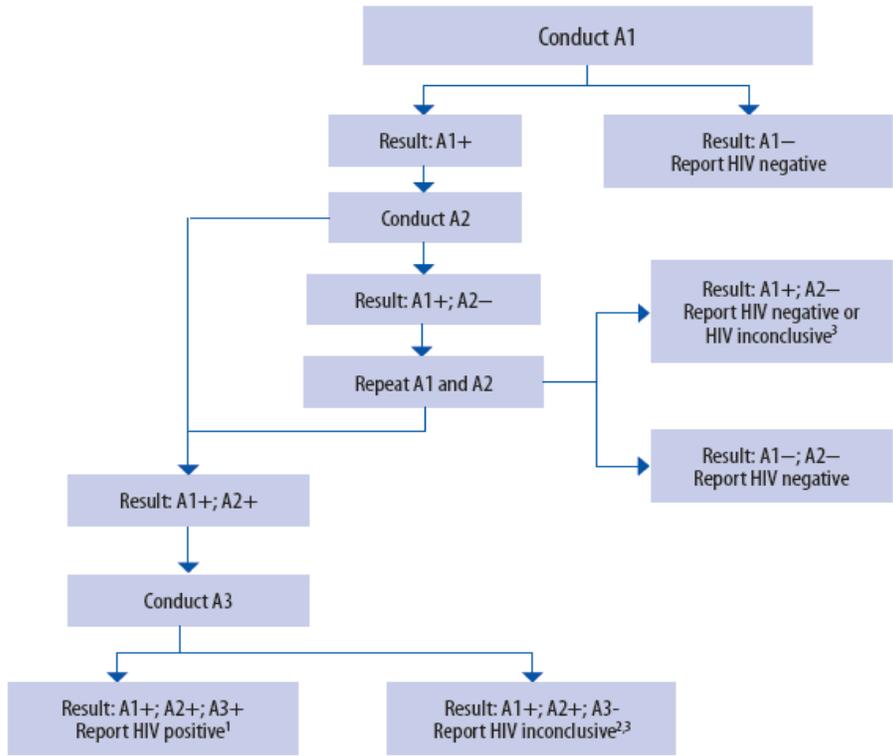
### 2.4.3. HIV and STI testing

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. (26) 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 Bionline HIV 1/2 rapid test. The third test kit was ABON Tri-Line Human Immunodeficiency Virus Rapid Test was used according to the algorithm outlined

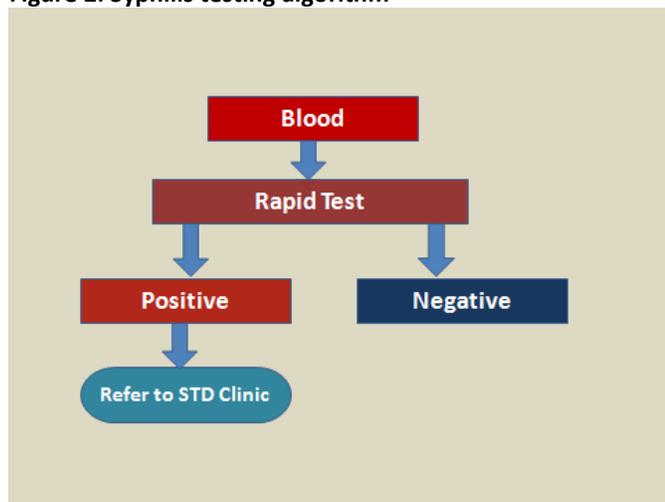
in the below, when the results were indeterminate with the first two assays. All positive samples were sent to NSACP for confirmation of the HIV status according to the national algorithm. Quality assurance was ensured by rechecking every 10th negative sample and all the positive samples by the National 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

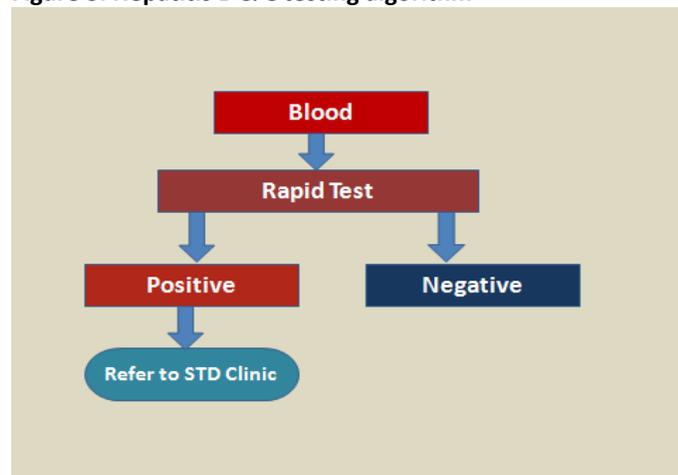
**Figure 2: Syphilis testing algorithm**



negative samples were sent to NSACP.

**Hepatitis B testing:** the blood samples were subjected to an immunochromatographic rapid assay – Determine HB TP, to determine the serological evidence of Hepatitis B according to the algorithm in the below figure. Those that tested negative were declared as negative and the samples which showed reactivity with rapid test were sent to the laboratory of Lanka Hospital Plc for testing and reconfirmation. All positive, respondents were referred to the nearest STD clinic for follow up.

Figure 3: Hepatitis B & C testing algorithm



**Hepatitis C testing:** the blood samples were subjected to an immunochromatographic rapid assay – SD Bioline HCV, to determine the serological evidence of Hepatitis C according to the algorithm given in above figure. The Hepatitis C test was limited to the PWIDs. Those that tested negative were declared as negative and the samples which showed reactivity with rapid test were sent to the laboratory of Lanka Hospital Plc for testing and reconfirmation. All positive, respondents were referred to the nearest STD clinic for follow up.

**Herpes testing:** the blood samples were subjected to an IGG testing assay at the laboratory of Lanka Hospital Plc to assess the prevalence of Herpes among the key population of Beach Boys. Herpes testing was limited to the BBs.

## 2.5. Data Collection

The formative assessment identified the initial seeds, purposely selected to reflect the diversity of social networks in the location in order to logistically enable the survey to reach equilibrium in a feasible time period. One discreet office space/survey site in each of the districts was used to administer interviews and biological testing. The locations were selected based on central access and security. Only survey staff, investigators, and participants with valid peer recruitment coupons were granted access beyond the reception area. To avoid stigma by the public, signs did not reveal the actual purpose of the office. The survey office remained for a couple weeks after the last enrolment to ensure all participants received results, referrals, and secondary incentives.

The screener and coupon manager examined the coupon presented by the potential participant for dates, originality, and unique testing codes (UTC), to confirm the potential participant had not been enrolled previously. The potential participant's eligibility was assessed through a short personal interview to screen for eligibility covering the eligibility criteria listed above. When doubts about eligibility remained, staff or key population volunteers/outreach workers as part of the study team were asked to pose additional (non-standardized) questions to confirm true eligibility. All participants were required to provide informed consent.

The training of interviewers entailed 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).

The peer recruitment coupon linked participants to those whom they referred to the survey and was used for the analysis of RDS data to adjust for network size and homogeneity within social circles.

## 2.6. Quality Assurance, Monitoring and Supervision

Quality control measures included one in every ten samples, and every positive sample, sent to the nearest NASCP National reference laboratory (one per district) for confirmatory Eliza and VDRL testing. Any deviations in the reported results to study respondents (via rapid testing on site) and the National lab results, were carefully reviewed for human or other error. The overall net discrepancy rate between the results at the IBBS site and the results at the NSACP national lab is about 3.2%.

Through appropriate documentation, training and use of national laboratories, discrepancies the biological component was closely monitored. Both off site and on-site training was provided, and routine supervision visits by the microbiologist to all sites, was undertaken. Test results were entered into a data entry programme, and emailed to the Field Team Supervisor weekly, while hard copies were collected monthly as well.

## 2.7. Data Management and Analysis

Survey data was entered in electronic format directly by the interviewer during the interview process using ODK. To ensure quality of data, built in checks were programmed into the questionnaire and verification of completeness and internal consistency was performed automatically.

At the end of each day, the site supervisor (e.g. field team leader in most cases, depending on composition of the study teams in each district) uploaded all interview files from the tablets to the data warehouse online, where access was limited amongst the survey team. Any paper-based tools (recruitment forms, non-response forms, etc.) were entered daily at the survey site by the interviewer or coupon managers into an excel database, reviewed by the site supervisor, then sent in to the Supervisor.

Management of codes from both survey results and HIV test results was performed by the site supervisor and coupon manager on a daily basis. RDS Coupon Manager at each site used a coupon to track referral processing and coupons.

On a weekly basis the NASCP laboratory emailed the test results to the Supervisor and on a monthly basis hard copies of the testing reports were collected. HIV test results were extracted from the excel database from the National laboratory and sent to the data analysis team for merging with the behavioural data.

The analysis of RDS data requires adjustment for social network size and homophily within networks. Specialized analyses were conducted 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.

RDS-A<sup>16</sup>, Version 0.61, and SPSS, Version 24, were 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-A also produces survey weights. Multivariate survey logistic regression analyses

---

<sup>16</sup> Mark S. Handcock, Ian E. Fellows, Krista J. Gile (2014) RDS Analyst: Software for the Analysis of Respondent-Driven Sampling Data, Version 0.61, URL <http://hpmrg.org>.

adjusted for RDS complex sampling design were conducted using the same software (RDS-A).

As a basic surveillance activity, the primary analyses encompassed calculation of adjusted population estimates of disease prevalence (HIV), key risk behaviours (e.g., unprotected sex), and access to and use of HIV prevention programs and services. Stratified analyses was also done to identify sub-populations at higher risk. Using RDS-A exported weights, survey logistic regression analyses adjusted for RDS complex sampling design were conducted to identify significant associations between socio-demographic and behavioural factors and respectively knowing HIV status from an HIV test, using a condom at last sex/using a sterile needle and syringe at last injection (only among PWID), and prevention programme reach. Finally, key indicators were compared between this and the previous IBBS survey conducted in 2014/15.

## 2.8. Ethical Considerations

A primary ethical concern of this survey was that participation in the survey may reveal that respondents are engaging in illegal and stigmatized behaviours, including sex work and illegal drug use. Inadvertent disclosure of information collected from survey procedures may subject persons to discrimination and potential harm. HIV sero-status may also subject participants to stigma and discrimination if inadvertently revealed to persons outside the survey. Although participants provided informed consent, several procedures were taken to minimize the risk of these disclosures.

- Names or other identifying information were not written on the survey, survey forms, or on any lab specimens.
- All paper-based survey materials were stored in locked file cabinets, in locked offices and access was limited in the same manner as for electronic data.
- Staff did not ask for identification (such as government issued I.D.) from any participant.
- All staff working with participants was required to sign an employee confidentiality agreement.

The research protocol was submitted for ethical approval to the Medical Faculty of the University of Sri Jayewardenepura, in Sri Lanka and the approval was received in October 2017.

### 3. Summary results

#### 3.1 Female sex workers

##### 3.1.1 Colombo

A total of 458 FSW respondents were recruited in Colombo, including 4 seeds. For estimates, Gile's SS with population size estimate of 6,157 was used along with 0.95 confidence intervals, and 5,000 bootstraps. Across the tables presented below, because estimates based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

##### Homophily and Convergence

As previously mentioned, a homophily value of one means no homophily, while values above one show the presence of positive homophily (e.g. people are recruiting similar to themselves), and values below 1 mean negative homophily (e.g. people are recruiting different from themselves). In the FSW Colombo sample, the homophily ranged from 0.72 to 1.26, overall this can be interpreted as weak homophily. Convergence was clearly reached on five out of seven key indicators, with the population estimates becoming stable around the 250<sup>th</sup> participant. The remaining two indicators, related to knowledge of HIV status and avoidance of HIV services, converged somewhat later during sampling – for the indicator of knowledge of HIV status the population estimates are becoming stable around the 400<sup>th</sup> participant, and for the indicator avoidance of HIV services around the 150<sup>th</sup> participant.

**Table 5: Homophily analysis**

	<i>Target indicator</i>	<i>Recruitment homophily</i>	<i>Estimated population homophily</i>
1	HIV prevalence among FSW (% HIV positive) <sup>1</sup>	-	-
2	Active syphilis among FSW <sup>2</sup>	-	-
3	Viral hepatitis among FSW (HBV) <sup>1</sup>	-	-
4	HIV and hepatitis co-infection among FSW <sup>3</sup>	-	-
5	3.4 <sup>4</sup> Knowledge of HIV status among FSW (% Know HIV status from an HIV test)	1.14*	1.19
6	3.7 <sup>5</sup> Coverage of HIV prevention programs among FSW (% Reached with HIV/AIDS prevention programs)	1.07*	1.26
7	Condom use among FSW (% Used a condom the last time they had sex with a client)	(1.00)	-
8	4.1 <sup>6</sup> Discriminatory attitudes towards PLHIV (% who answer 'No' to at least one of the two questions)	1.05	1.16
9	4.2 <sup>7</sup> Avoidance of HIV services because of stigma and discrimination among FSW (% who answer 'Yes' to at least one of the reasons)	0.72	0.43
10	Age (% Mdn+)	1.03	1.03
11	Income (% 20,000 Rs.+)	1.04	1.16

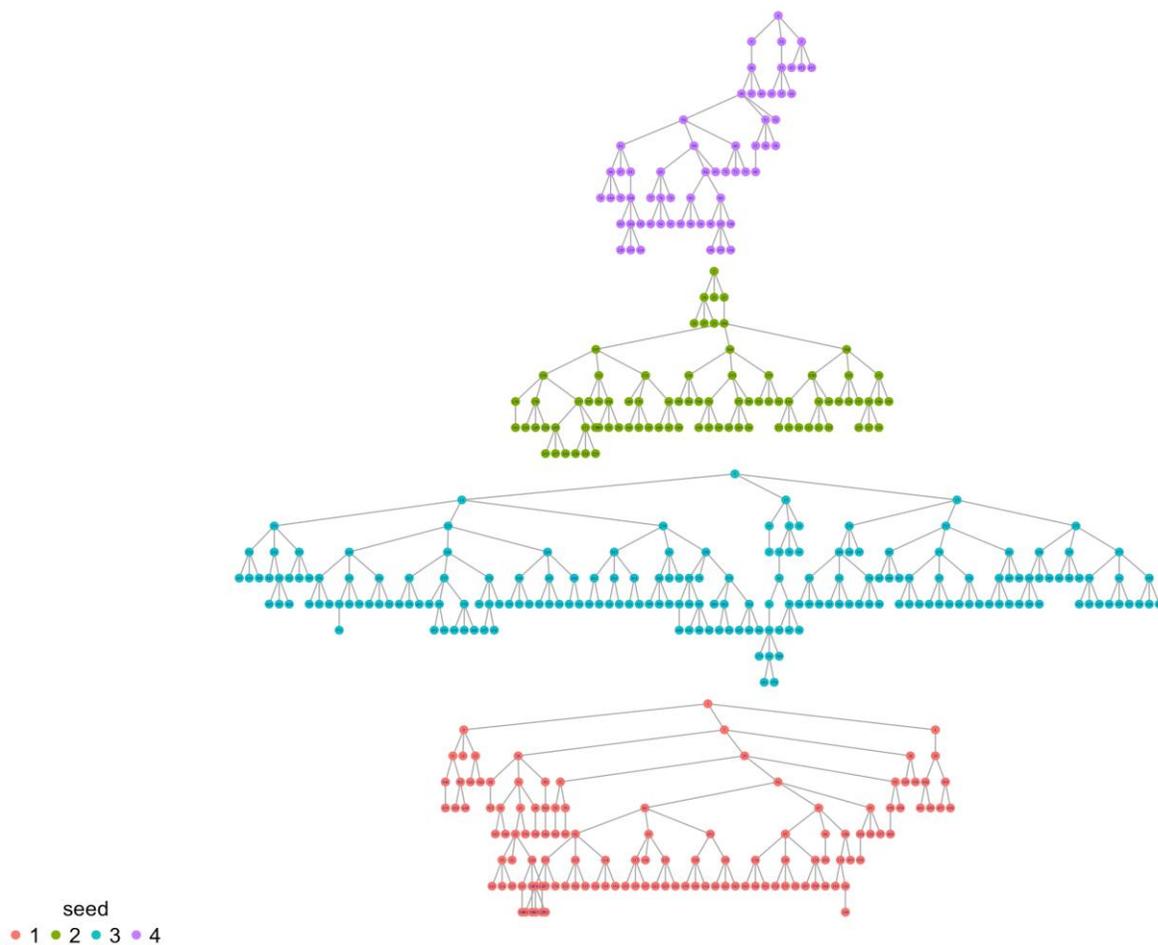
<sup>1</sup> Not calculated because there were three positive cases. <sup>2</sup> Not calculated because there were two positive cases. <sup>3</sup> Not calculated because there were not any positive cases. <sup>4</sup> Tested and positive or tested in the past 12 months and negative. <sup>5</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Tested for STI). <sup>6</sup> Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?; Do you think that children living with HIV should be able to attend school with children who are HIV negative? <sup>7</sup> Did not seek HIV testing /prevention /treatment services because of: Fear of or concern about stigma by staff or neighbours; Fear of or concern about or experienced violence; Fear of or concern about or experienced police harassment or arrest. This Global AIDS Monitoring indicator has changed.

\*  $p < .05$

### Recruitment

Recruitment started with four initial respondents (seeds). Among them, two seeds were more productive, accounting for 41.0 and 27.3% of the sample, respectively. The other two seeds were somewhat less productive, with recruitment through them ranging from 13.3% to 18.3% of the total sample.

Figure 4. Recruitment tree – FSW Colombo



**Table 6: Recruitment information**

Characteristic	Responses	Sample proportion n/N (%)
Main reason for participation	Interest in HIV and sexual health	109/458 (23.8)
	HIV test	242/458 (52.8)
	Interest in issues related to FSW	89/458 (19.4)
	Helping the community	9/458 (2.0)
	Friend wanted me to participate	9/458 (2.0)
	Someone forced me	0/458 (0.0)
	Incentive/Gift	0/458 (0.0)
Mode of receiving the coupon	Received the coupon from a friend/ acquaintance	454/458 (99.1)
	Found the coupon laying around somewhere	0/458 (0.0)
	Bought or exchanged it for something	0/458 (0.0)
	Seed (from the IBBS office)	4/458 (0.9)
Acquaintances for:	< 6 months	132/453 (29.1)
	6 months – 1 year	119/453 (26.3)
	> 1 year	202/453 (44.6)
	Rather not say	1/454 (0.2)
Screener's confidence that participant is FSW	Confident	456/458 (99.6)
	Somewhat confident	2/458 (0.4)

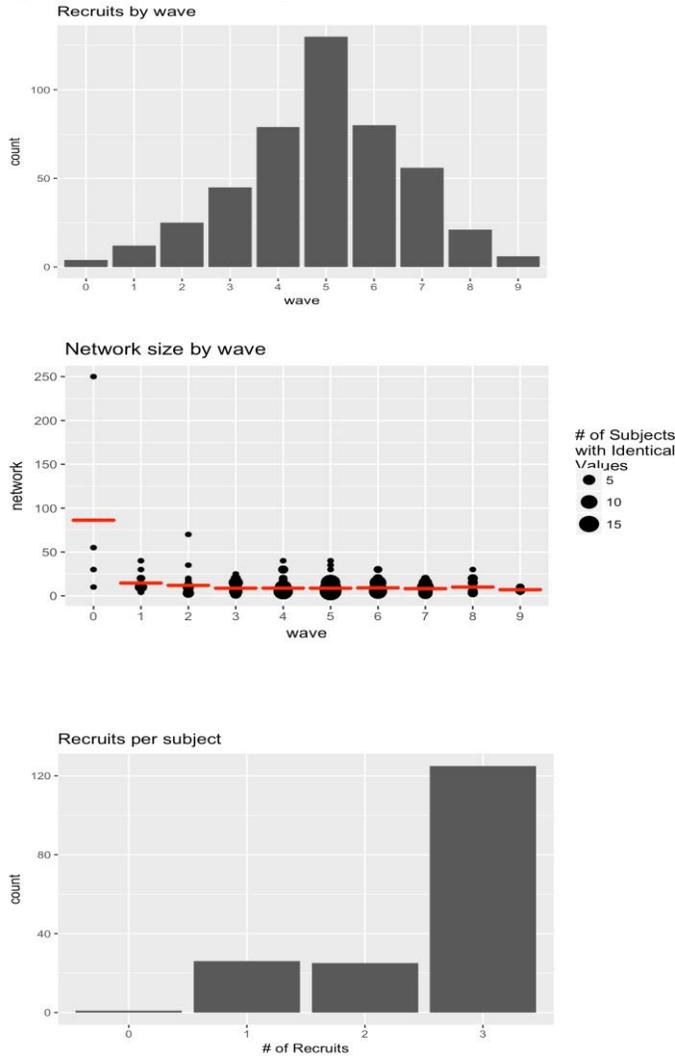
As a mean, study participants knew about seventeen other FSW. When asked how many of the FSW they knew who were at least 18 years of age, who lived in Colombo, and who they have seen in the past one month, as a mean study participants knew ten other FSW.

**Table 7: Network size questions**

Characteristic	Sample statistics
How many women do you know (they know your name and you know theirs), who have sold sex in the last 12 months?	<i>M (SD)</i> = 17.1 (19.65) Mdn = 15 Range = 1 – 350
Of these ___ [number in the previous question] women that you mentioned in the answer to the previous question, how many are above the age of 18?	<i>M (SD)</i> = 15.7 (18.40) Mdn = 13.5 Range = 1 – 325
Of these ___ [number in the previous question] women that you mentioned in the answer to the previous question, how many live, work or study in ___[city of survey]? <sup>1</sup>	<i>M (SD)</i> = 13.4 (16.37) Mdn = 10 Range = 1 – 300
Of these ___ [number in the previous question] women that you mentioned in the answer to the previous question, how many have you seen in the past 1 month? <sup>2,3</sup>	<i>M (SD)</i> = 9.8 (13.35) Mdn = 8 Range = 1 – 250

<sup>1</sup> One respondent answered with zero. Her answer was changed to one. <sup>2</sup> One respondent answered with zero. Her answer was changed to one. <sup>3</sup> In the estimation of population frequencies and statistics, this question was used as the network size question.

**Figure 5. Recruitment diagnostics – FSW Colombo**



A total of nine waves were reached among FSW in Colombo, with the majority of respondents recruited in waves four, five, and six (17.2, 28.4, and 17.5%, respectively). As is expected, the mean network size is lower in subsequent waves, ranging from 86 (Mdn = 43) in wave zero to between 7 and 10 in all subsequent waves. Overall, recruitment in Colombo went well, with a majority of study participants recruiting in the study three other FSW.

## Biological Indicators

**Table 8: Biological test results**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Positive for HIV		3/458 (0.7)	0.4 (0.0, 1.0)
Positive for syphilis (VDRL)	Reactive	2/458 (0.4)	0.4 (0.0, 0.9)
	Weakly reactive	5/458 (1.1)	1.8 (0.0, 3.7)
Positive for syphilis (TPPA) <sup>1</sup>		40/457 (8.8)	8.4 (6.3, 10.6)
Positive for syphilis (onsite testing)		45/458 (9.8)	9.6 (6.4, 12.9)
Positive for hepatitis B surface antigen		3/458 (0.7)	0.6 (0.0, 1.3)
HIV and hepatitis co-infection		0/458 (0)	-

<sup>1</sup> One sample provided inconclusive results and was excluded from the analysis

## Socio-Demographic Characteristics

All FSW in Colombo were born in Sri Lanka and have Sri Lankan citizenship. District of residence in the past year was for the majority of FSW Colombo (92.2%).

**Table 9: Citizenship and Residence**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Citizenship	Sri Lankan	457/457 (100)	-
	Rather not say	1/458 (0.2)	-
Country of birth	Sri Lanka	458/458 (100)	-
District of residence in the past year	Yes	454/457 (99.3)	99.2 (98.5, 100)
	Rather not say	1/458 (0.2)	-
Primary residence is Colombo	Yes	401/457 (87.7)	87.0 (83.2, 90.9)
	Don't know	1/458 (0.2)	-

Mean age of FSW in Colombo is 41.5 years, with more than one-third (41.4%) at least 45 years of age. With regard to ethnicity and language spoken at home, about four in five (70.0 and 87.2%, respectively) FSW in Colombo are Sinhalese. Every sixth FSW in Colombo cannot read and write (13.9%), although almost all FSW in Colombo have attended at least some formal education (93.4%). About two-thirds (56.9%) of FSW in Colombo have a source of other than sex work, three in four (76.3%) earn less than 30,000 Sri Lankan Rupees per month (194 USD). According to the last available World Bank data for 2016, GNI per capita is in Sri Lanka 3,850 USD. Similarly, compared to the general population in Sri Lanka, among which 10.4% was in 2011 living at 5.50 USD per day, a majority of FSW in Colombo is likely living in poverty.

**Table 10: Core socio-demographic indicators**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age	Sample <i>M (SD)</i> = 41.0 (11.06) Mdn = 40.0 N = 457 Range = 18 - 69	Pop. est. <i>M (SD)</i> = 41.5 (10.96) Mdn = 40.0 - -		
Age groups	18 - 24 25 - 34 35 - 44 ≥ 45		36/457 (7.9) 100/457 (21.9) 136/457 (29.8) 185/457 (40.5)	6.8 (4.3, 9.3) 20.2 (15.7, 24.9) 31.6 (26.0, 37.0) 41.4 (35.6, 47.3)
Sex	Woman		458/458 (100)	-
Sex same as at birth			458/458 (100)	-
Ethnicity	Sinhalese Sri Lankan Tamil Indian Tamil Moor/Muslim Burgher Malay Other		343/458 (74.9) 82/458 (17.9) 12/458 (2.6) 21/458 (4.6) 0/458 (0.0) 0/458 (0.0) 0/458 (0.0)	70.0 (64.3, 75.8) 22.2 (16.9, 27.4) 2.6 (0.4, 4.8) 5.2 (2.2, 8.2) - - -
Languages spoken at home (multiple response)	Sinhalese Tamil English Other		395/458 (86.2) 87/458 (19.0) 1/458 (0.2) 4/458 (0.9)	87.2 (83.4, 91.0) 22.7 (17.6, 28.0) 0.4 (0.0, 1.0) 0.4 (0.0, 0.8)
Can read and write	Yes		382/458 (83.4)	86.1 (82.3, 89.9)
Completed level of education	Never attended school Grade 1-5 Grade 6-10 Passed O/L Passed A/L Completed Diploma Completed Degree		43/458 (9.4) 70/458 (15.3) 164/458 (35.8) 138/458 (30.1) 33/458 (7.2) 7/458 (1.5) 3/458 (0.7)	6.6 (4.3, 8.9) 14.7 (10.8, 18.7) 33.2 (27.9, 38.4) 35.6 (30.2, 41.1) 7.4 (4.0, 10.7) 1.7 (0.3, 3.0) 0.8 (0.0, 1.8)
Earns money doing anything other than sex work (i.e., has other sources of income)	Yes		244/458 (53.3)	56.9 (50.8, 63.1)
Main activity			-1	-1
Income <sup>2</sup>	< 5,000 Rupees 5,000-10,000 10,001-20,000 20,001-30,000 30,001-40,000 > 40,000 Rupees		19/457 (4.2) 24/457 (5.3) 72/457 (15.8) 151/457 (33.0) 106/457 (23.2) 85/457 (18.6)	4.3 (2.0, 6.5) 3.9 (1.9, 5.9) 16.1 (11.6, 20.5) 28.7 (24.0, 33.4) 23.3 (18.8, 27.9) 23.7 (18.3, 29.1)

<sup>1</sup> Data not available due to translation error; <sup>2</sup> Central Bank of Sri Lanka currency exchange rate on 28 February 2018 (1 USD = 154.74 Sri Lankan Rs.), available at [http://www.cbsl.gov.lk/htm/english/\\_cei/er/e\\_1.asp](http://www.cbsl.gov.lk/htm/english/_cei/er/e_1.asp)

Half of FSW in Colombo live in their own home (29.0%) or in their parents' home (28.2%) and as many as one in five (17.7%) lives in a temporary shelter. Three in four FSW in Colombo are involved in a relationship (73.3%), among which 90.2% with a man, and a majority of FSW in Colombo do not have any children (61.7%).

**Table 11: Household information and family life**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)		
Type of residence	Temporary shelter	90/458 (19.7)	17.7 (13.7, 21.7)		
	Boarding house	107/458 (23.4)	21.5 (17.0, 26.1)		
	Parents' home	113/458 (24.7)	28.2 (22.9, 33.7)		
	My own home	132/458 (28.8)	29.0 (23.5, 34.5)		
	Lodging	1/458 (0.2)	0.3 (0.0, 0.9)		
	On the street	7/458 (1.5)	1.4 (0.2, 2.7)		
	Brothel	8/458 (1.7)	1.7 (0.4, 3.0)		
Number of household members	<table border="1"> <tr> <td>Sample <i>M (SD)</i> = 3.9 (1.60) Mdn = 4.0 N = 438 Range = 1 - 10</td> <td>Pop. est. <i>M (SD)</i> = 3.8 (1.67) Mdn = 3.0 - -</td> </tr> </table>	Sample <i>M (SD)</i> = 3.9 (1.60) Mdn = 4.0 N = 438 Range = 1 - 10	Pop. est. <i>M (SD)</i> = 3.8 (1.67) Mdn = 3.0 - -		
Sample <i>M (SD)</i> = 3.9 (1.60) Mdn = 4.0 N = 438 Range = 1 - 10	Pop. est. <i>M (SD)</i> = 3.8 (1.67) Mdn = 3.0 - -				
Number of children currently living in the household	No children	210/425 (49.4)	51.1 (44.9, 57.3)		
	One	83/425 (19.5)	15.0 (11.5, 18.5)		
	Two	82/425 (19.3)	20.3 (14.9, 25.7)		
	Three or more	50/425 (11.8)	13.6 (8.5, 18.7)		
	Don't know/Rather not say	33/458 (7.2)	-		
Number of children	No children	235/421 (55.8)	61.7 (55.8, 67.7)		
	One	90/421 (21.4)	18.1 (13.7, 22.5)		
	Two	65/421 (15.4)	13.2 (9.8, 16.7)		
	Three or more	31/421 (7.4)	6.9 (3.5, 10.4)		
	Don't know/Rather not say	37/458 (8.1)	-		
Marital status	Single (Never married)	58/458 (12.7)	15.7 (11.3, 20.0)		
	Married	202/458 (44.1)	39.0 (33.4, 44.7)		
	Divorced/Separated	151/458 (33.0)	35.1 (29.1, 41.2)		
	Widowed	47/458 (10.3)	10.2 (6.8, 13.6)		
Cohabitation	Living together with a partner/ spouse	155/456 (34.0)	27.8 (22.5, 32.9)		
	Involved in a relationship without living together	199/456 (43.6)	45.5 (39.4, 51.7)		
	Have no relationship/Do not have a partner	102/456 (22.4)	26.7 (21.1, 32.5)		
	Rather not say	2/458 (0.4)	-		
Sex of partner	Woman	32/353 (9.1)	9.8 (4.3, 15.4)		
	Man	321/353 (90.9)	90.2 (84.6, 95.7)		
	Rather not say	1/354 (0.3)	-		

Only two-thirds of FSW in Colombo have ever heard of HIV/AIDS (67.2%) and among them, a quarter (27.2%) have received the most thorough information about HIV/AIDS from NGOs and another 22.3% from the health services. Among FSW in Colombo who have heard of HIV/AIDS, somewhat fewer than half (41.6%) have never discussed HIV/AIDS with any of their partners.

## HIV/AIDS

**Table 12: General knowledge about HIV/AIDS**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has heard of HIV/AIDS	Yes	314/454 (69.2)	67.2 (61.7, 72.7)
	No	140/454 (30.8)	32.8 (27.3, 38.3)
	Don't know	4/458 (0.9)	-
Main source of the most thorough understanding of HIV/AIDS	School	17/314 (5.4)	6.9 (3.3, 10.7)
	Health services	77/314 (24.5)	22.3 (15.2, 29.2)
	Workplace	6/314 (1.9)	2.2 (0.2, 4.2)
	Friends/Family	35/314 (11.1)	12.5 (7.6, 17.5)
	Television	12/314 (3.8)	6.0 (1.3, 10.8)
	Newspaper/Magazines	17/314 (5.4)	8.0 (2.1, 14.1)
	Posters/Billboards	23/314 (7.3)	10.8 (4.5, 17.3)
	Pamphlets/Leaflets	11/314 (3.5)	3.0 (0.7, 5.3)
	Radio	1/314 (0.3)	0.5 (0.0, 1.2)
	NGOs	114/314 (36.3)	27.2 (20.3, 33.8)
Other	1/314 (0.3)	0.5 (0.0, 1.5)	
Discussed HIV with any sexual partner	Yes, all	50/314 (15.9)	11.3 (7.2, 15.3)
	Yes, some	124/314 (39.5)	46.6 (39.0 54.1)
	No, none	137/314 (43.6)	41.6 (34.3 48.9)
	Don't know	3/314 (1.0)	0.6 (0.0 1.1)
Partner ever disclosed their HIV status	Yes, all	41/174 (23.6)	15.6 (9.0 22.0)
	Yes, some	114/174 (65.5)	74.8 (66.2 83.7)
	No, none	16/174 (9.2)	8.7 (2.7 14.7)
	Don't know	3/174 (1.7)	0.9 (0.1 1.7)
Knows somebody who is HIV-positive or has died of AIDS	Yes	115/313 (36.7)	35.6 (28.8 42.3)
	Rather not say	1/314 (0.3)	
Close friend or relative died of AIDS	Yes, close relative	5/314 (1.6)	1.3 (0.0 2.8)
	Yes, close friend	30/314 (9.6)	9.5 (5.9 13.2)
	Yes, close relative and close friend	2/314 (0.6)	0.3 (0.0 0.8)
	No	270/314 (86.0)	85.3 (80.0 90.5)
	Don't know	7/314 (2.2)	3.5 (0.0 7.4)

As many as 40% of FSW in Colombo cannot gauge their risk of HIV. Among FSW in Colombo who perceive their personal HIV risk as low or none (21.0%), believe so because they trust their partner/s (65.0%) or because they always use condoms (53.2%). FSW in Colombo who perceive their personal

HIV risk as moderate or high (39.0%) believe so because they have had many sexual partners (85.6%).

**Table 13: Perception of personal HIV Risk**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Personal HIV risk	No risk	40/457 (8.8)	8.5 (4.9, 12.1)
	Low risk	54/457 (11.8)	12.5 (8.2, 16.8)
	Moderate risk	93/457 (20.4)	19.2 (14.6, 23.9)
	High risk	111/457 (24.3)	19.8 (15.5, 24.1)
	Don't know	159/457 (34.8)	40.0 (34.0, 45.9)
	Rather not say	1/458 (0.2)	-
Reasons for perceiving the risk as moderate or high (multiple response)	Many sexual partners	177/204 (86.8)	85.6 (79.6, 91.5)
	Didn't always use condoms	21/204 (10.3)	14.2 (6.3, 22.1)
	Injected drugs	2/204 (1.0)	1.5 (0.0, 3.7)
	Partner has other partners	17/204 (8.3)	9.8 (3.6, 16.0)
	Don't know	9/204 (4.4)	4.6 (1.1, 8.2)
Reasons for perceiving no or low risk (multiple response)	Trust my partner/s	58/93 (62.4)	65.0 (51.5, 78.3)
	Always use condoms	50/93 (53.8)	53.2 (39.3, 67.0)
	Don't know	7/93 (7.5)	6.2 (0.2, 12.1)
	Rather not say	1/94 (1.1)	-

Fewer than one in five (17.1%) FSW in Colombo can correctly identify modes of sexual transmission of HIV and reject major misconceptions about transmission HIV. When looking at specific items that that the composite indicator consists of, about half of FSW in Colombo know that a person can reduce the risk of getting HIV by using a condom every time he/she has sex a person (48.1%) or that a healthy-looking person can have HIV (47.7%). Somewhat fewer, 36.8% also know that a person cannot get HIV by sharing food with someone who is infected.

**Table 14: GAM 5.1 Knowledge about HIV prevention**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners	<u>Among all</u> Yes	203/453 (44.8)	43.1 (38.1, 48.0)
	<u>Among those aged 18 - 24<sup>1</sup></u> Yes	16/36 (44.4)	(41.7 (28.9, 54.2))
Person can reduce the risk of getting HIV by using a condom every time he/she has sex	<u>Among all</u> Yes	226/451 (50.1)	48.1 (43.2, 53.1)
	<u>Among those aged 18 - 24<sup>1</sup></u> Yes	18/35 (51.4)	(48.0 (34.6, 61.0))
Healthy-looking person can have HIV	<u>Among all</u> Yes	225/453 (49.7)	47.7 (42.8, 52.4)
	<u>Among those aged 18 - 24<sup>1</sup></u>		

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Yes	18/36 (60.0)	(48.0 (34.4, 61.4))
Person can get HIV from mosquito bites	Among all No	215/453 (47.5)	46.4 (41.6, 51.2)
	<u>Among those aged 18 – 24<sup>1</sup></u> No	21/36 (58.3)	(64.1 (47.9, 81.0))
Person can get HIV by sharing food with someone who is infected	<u>Among all</u> No	171/453 (37.7)	36.8 (31.8, 41.8)
	<u>Among those aged 18 – 24<sup>1</sup></u> No	16/36 (44.4)	(50.8 (34.7, 67.6))
GAM 5.1 Composite indicator for knowledge about HIV prevention (1-5 <sup>2</sup> )	<u>Among all</u> # of correct answers		
	None	156/454 (34.4)	35.8 (30.1, 41.4)
	One	24/454 (5.3)	4.1 (2.4, 5.9)
	Two	49/454 (10.8)	11.2 (7.3, 15.2)
	Three	62/454 (13.7)	15.5 (10.8, 20.1)
	Four	83/454 (18.3)	18.4 (13.9, 22.9)
	Five	80/454 (17.6)	15.0 (10.8, 19.2)
	<u>Among those aged 18 - 24<sup>1</sup></u> # of correct answers <sup>3</sup>		
	None	9/36 (25.0)	(19.7)
	One	2/36 (5.6)	(5.5)
	Two	8/36 (22.2)	(30.6)
	Three	5/36 (13.9)	(11.8)
Four	4/36 (11.1)	(13.4)	
Five	8/36 (22.2)	(19.1)	
HIV can be transmitted from mother to her unborn child	Yes	272/357 (59.5)	57.5 (51.5, 63.4)
	No	151/357 (33.0)	36.4 (30.6, 42.2)
	Don't know	34/357 (7.4)	6.2 (3.9, 8.4)
		1/458 (0.2)	-
Ever heard of ART	Yes	236/458 (51.5)	51.8 (45.4, 58.2)
	No	207/458 (45.2)	45.5 (39.0, 52.0)
	Don't know	15/458 (3.3)	2.8 (1.1, 4.4)

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.<sup>2</sup> Don't know is recorded as incorrect. Numerator for individual and the composite indicator excludes those who have never heard of HIV/AIDS, while all who had a valid answer to the question regarding whether they had ever heard of HIV/AIDS are included in the denominator. <sup>3</sup> 95% CI cannot be calculated

Among FSW in Colombo who have ever heard of HIV/AIDS, more than half (57.7%) exhibit a discriminatory attitude towards PLHIV, with somewhat fewer saying that they would not buy fresh vegetables from a shopkeeper or vendor if she knew that this person had HIV (47.7%) than saying that they think children living with HIV should not be able to attend school with children who are

HIV negative (61.3%). Among FSW in Colombo aged between 18 and 49 percentages are similar, with 50.9% of them exhibiting a discriminatory attitude towards PLHIV.

**Table 15: GAM 4.1 Discriminatory attitudes towards PLHIV**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Thinks that children living with HIV should be able to attend school with children who are HIV negative	<u>Among all</u>		
	Yes	196/302 (64.9)	61.3 (53.7, 69.0)
	No	106/302 (35.1)	38.7 (31.0, 46.3)
	Don't Know/Not sure/It depends	11/314 (3.6)	-
	Rather not say	1/314 (0.3)	-
	<u>Among those aged 18-49</u>		
	Yes	147/225 (65.3)	63.3 (55.0, 71.9)
	No	78/225 (34.7)	36.7 (28.1, 45.0)
	Don't know/Not sure/It depends	8/234 (3.4)	-
	Rather not say	1/234 (0.4)	-
	<u>Among those aged 25-49 years</u>		
	Yes	129/197 (65.5)	63.5 (54.6, 72.4)
	No	68/197 (34.5)	36.5 (27.6, 45.4)
Don't know/Not sure/It depends	8/206 (3.9)	-	
Rather not say	1/206 (0.5)	-	
Would buy fresh vegetables from a shopkeeper or vendor if she knew that this person had HIV?	<u>Among all</u>		
	Yes	158/306 (51.6)	47.7 (40.4, 54.9)
	No	148/306 (48.8)	52.3 (45.1, 59.6)
	Don't Know/Not sure/It depends	7/314 (2.2)	-
	Rather not say	1/314 (0.3)	-
	<u>Among those aged 18-49</u>		
	Yes	122/228 (53.5)	50.9 (42.7, 59.0)
	No	106/228 (46.5)	49.1 (41.0, 57.3)
	Don't know/Not sure/It depends	5/234 (2.1)	-
	Rather not say	1/234 (0.4)	-
	<u>Among those aged 25-49 years</u>		
	Yes	104/200 (52.0)	49.2 (40.5, 57.8)
	No	96/200 (48.0)	50.8 (42.2, 59.5)
Don't know/Not sure/It depends	5/206 (2.4)	-	
Rather not say	1/206 (0.5)	-	
GAM 4.1 Composite indicator for discriminatory attitudes towards PLHIV (1-2 <sup>1</sup> )	Responded 'No' to either of the two questions		
	<u>Among all</u>	165/307 (46.3)	57.7 (50.5, 64.9)
	<u>Among those aged 18-49</u>	120/229 (52.4)	55.0 (46.4, 63.6)
	<u>Among those aged 25-49</u>	107/201 (53.2)	56.3 (47.4, 65.2)

<sup>1</sup> Participants who responded don't know/not sure/it depends and those who refused to answer were excluded from the analysis. Numerator: Number of respondents who respond no to either of the two questions; Denominator: Number of all respondents who have heard of HIV.

Two in three (65.9%) FSW in Colombo know where to receive an HIV test, with a majority (89.4%) mentioning government STI clinic as a place that they know offers an HIV test. Although 50.8% of FSW in Colombo have ever tested for HIV, only one-third (31.5%) have received an HIV test within 12 months before the survey was carried out. Among those who ever did receive an HIV test, almost all (89.2%) have received their last HIV test at a government STI clinic.

**Table 16: HIV testing**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Knows where to receive an HIV test	Yes	324/458 (70.7)	65.9 (60.0, 71.8)
Places that offer HIV testing (multiple response)	Government clinic – STI	298/324 (92.0)	89.4 (84.4, 94.4)
	Government clinic – non-STI	30/324 (9.3)	12.3 (6.5, 17.9)
	Private clinic	49/324 (15.1)	20.2 (13.7, 26.7)
	Private pharmacy or chemist	5/324 (1.5)	3.6 (0.0, 7.9)
	Traditional healer/herbalist	2/324 (0.6)	0.4 (0.0, 1.0)
	Don't know any	9/324 (2.8)	4.3 (0.4, 8.2)
Knows HIV status from an HIV test	No, I have never been tested	144/452 (31.9)	34.1 (28.7, 39.6)
	Yes, I have been tested	252/452 (55.8)	50.8 (44.8, 56.8)
	Don't know	56/452 (12.4)	15.1 (10.2, 20.0)
	Rather not say	6/458 (1.3)	-
Last HIV test	< 6 months	85/251 (33.9)	28.0 (19.9, 35.7)
	6 – 12 months	76/251 (30.3)	36.2 (28.7, 44.0)
	> 12 Months	90/251 (35.9)	35.9 (27.5, 44.2)
	Rather not say	1/252 (0.4)	-
Result of last HIV test	Negative	239/252 (94.8)	94.8 (91.0, 98.6)
	Positive	3/252 (1.2)	1.2 (0.0, 3.6)
	Indeterminate	1/252 (0.4)	0.1 (0.1, 0.2)
	Didn't receive the result	2/252 (0.8)	1.0 (0.9, 1.2)
	Don't know	7/252 (2.8)	2.8 (0.3, 5.4)
GAM 3.4 Composite indicator for knowledge of HIV status <sup>1</sup> (1-3)		158/452 (35.0)	31.5 (25.7, 37.3)
Last HIV test was voluntary	Yes	243/251 (96.8)	96.7 (94.7, 98.6)
	Rather not say	1/252 (0.4)	-
Place where last HIV test was received	Government clinic – STI	226/250 (90.4)	89.2 (84.3, 94.0)
	Government clinic – non-STI	5/250 (2.0)	1.6 (0.2, 3.1)
	Private clinic	17/250 (6.8)	7.7 (3.7, 11.8)
	Private pharmacy or chemist	2/250 (0.8)	1.5 (0.0, 3.5)
	Traditional healer/herbalist	0/250 (0.0)	-
	Rather not say	2/252 (0.4)	-

<sup>1</sup> Numerator: Number of respondents who tested HIV-positive or who tested in the past 12 months and the result was negative; Denominator: Number of respondents who provided a valid answer to the question about their knowledge about their HIV status from an HIV test.

Note: Among the HIV positive case, none one was never tested, one was positive and one was negative – meaning that among the three that here said they were positive, only one tested positive also in the IBBS.

Among FSW in Colombo who have never received an HIV test a majority said that it was because they do not know where to go to receive it (54.2%) or because the testing location is inconvenient (23.7%). As many as half (48.2%) of FSW in Colombo avoid HIV services because of stigma and discrimination, namely fear or concern about stigma by staff and neighbours (32.0%), fear or concern about or experienced police harassment or arrest (9.7%), and fear or concern about or experienced violence (6.5%).

**Table 17: Reasons for never receiving an HIV test**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Reasons for never receiving an HIV test (multiple response) <sup>1</sup>	Don't know where to go	79/144 (54.9)	54.2 (44.7, 63.5)
	I always use condoms	6/144 (4.2)	5.2 (0.0, 11.8)
	Not at risk of getting HIV	3/144 (2.1)	1.6 (0.0, 3.8)
	Didn't have time/Too busy	17/144 (11.8)	11.7 (5.6, 17.9)
	I trust my partner	2/144 (1.4)	1.7 (0.0, 4.1)
	Afraid of knowing I may be HIV-positive	10/144 (6.9)	6.4 (2.5, 10.3)
	Lack of confidentiality	11/144 (7.6)	6.9 (2.8, 10.9)
	Inconvenient testing location	32/144 (22.2)	23.7 (15.2, 32.1)
	No money	3/144 (2.1)	1.9 (0.0, 4.0)
	Other reason	1/144 (0.7)	0.5 (0.0, 1.3)
	Don't know	12/144 (8.3)	7.7 (3.1, 12.4)
Never receiving an HIV test because of stigma and discrimination (multiple response) <sup>1</sup>	Fear or concern about stigma by staff or neighbours	42/140 (30.0)	32.0 (23.2, 41.4)
	Fear of or concern about or experienced violence	11/140 (7.9)	6.5 (2.7, 10.2)
	Fear of or concern about or experienced police harassment or arrest	16/140 (11.4)	9.7 (4.9, 14.5)
	Rather not say	4/144 (2.8)	-
GAM 4.2 Composite indicator for avoidance of HIV services because of stigma and discrimination (1-3) <sup>1</sup>	Did not receive an HIV test because of stigma and discrimination	68/140 (48.6)	48.2 (39.2, 57.1)

<sup>1</sup> Due to an error in routing, 56 women did not answer this question.

### Sexual Behaviour

The first time they had vaginal sex, FSW in Colombo were on average 18 years of age, although as many as half (46.3%) of FSW in Colombo were aged under 18 years. Their first sexual partner, however, was on average almost ten years older than them (26 years of age).

**Table 18: General sexual history**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age at first vaginal sex	Sample <i>M (SD)</i> = 18.1 (3.54) Mdn = 18.0 N = 451 Range = 12 – 35	Pop. est. <i>M (SD)</i> = 18.0 (3.13) Mdn = 18.0 - -		
	< 18		222/451 (49.2)	46.3 (40.7, 52.1)
Never had anal sex <sup>1</sup>			245/423 (57.9)	59.9 (53.6, 66.1)
Age at first anal sex	Sample <i>M (SD)</i> = 21.8 (4.99) Mdn = 21.0 N = 14 – 48 Range =	Pop. est. <i>M (SD)</i> = 20.7 (4.57) Mdn = 20.0 - -		
	< 18		25/178 (14.0)	22.7 (13.5, 32.7)
Age of partner at first sex (vaginal or anal)	Sample <i>M (SD)</i> = 25.9 (6.32) Mdn = 25.0 N = 421 Range = 16 – 53	Pop. est. <i>M (SD)</i> = 26.2 (6.14) Mdn = 25 - -		

<sup>1</sup> Item non-response was somewhat high, at 7.6%

In the week preceding the survey, FSW in Colombo have on average had eight sexual partners, with almost all (76.5%) of them having had five or more sexual partners. Half of FSW in Colombo (49.0%) has in the week preceding the survey had only paying sexual partners (clients).

**Table 19: Sexual partners in the past 7 days**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of sexual partners (anal or vaginal intercourse)	Sample <i>M (SD)</i> = 8.1 (5.18) Mdn = 8.0 N = 451 Range = 0 – 30	Pop. est. <i>M (SD)</i> = 7.8 (4.72) Mdn = 8.0 - -		
	0 – 2		53/451 (11.8)	10.1 (6.4, 13.8)
	3 – 4		58/451 (12.9)	13.3 (9.2, 17.5)
	5 or more		4/458 (75.4)	76.5 (71.2, 81.8)
Number of paying partners (clients) (among those who have had at least one sexual	Sample <i>M (SD)</i> = 7.4 (4.97) Mdn = 6.0	Pop. est. <i>M (SD)</i> = 7.0 (4.51) Mdn = 6.0		

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
partner in the past seven days)	N = 448	-		
	Range =1 - 28	-		
	1 - 2		61/448 (13.6)	12.6 (8.5, 16.6)
	3 - 4		82/448 (18.3)	17.9 (13.4, 22.4)
	5 or more		305/458 (68.1)	69.5 (63.8, 75.3)
Had sex only with paying partners (clients)			243/446 (54.5)	49.0 (42.9, 54.9)

In the month preceding the survey, FSW in Colombo have on average had twenty-six sexual partners, with three in four of them (73.6%) having had sixteen or more sexual partners. About one-third of FSW in Colombo (34.2%) has in the month preceding the survey had only paying sexual partners (clients). Only one in four (22.9%) FSW in Colombo has consistently used condoms in the month preceding the survey. On average, FSW in Colombo sell sex five days a week, with as many as three-quarters of them (76.4%) selling sex four or more days in an average week. Finally, in an average day FSW in Colombo sell sex to five paying partners (clients), with about one in four (23.1%) selling sex to three or more paying partners (clients) in an average day.

**Table 20: Sexual partners in the past 30 days**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of sexual partners (anal or vaginal intercourse)	Sample <i>M (SD)</i> = 26.0 (14.51) Mdn = 25.0 N = 458 Range = 0 - 100	Pop. est. <i>M (SD)</i> = 25.7 (13.84) Mdn = 25.0 - -		
	0		2/458 (0.4)	0.5 (0.0, 1.1)
	1 - 5		14/458 (3.1)	1.9 (0.7, 3.1)
	6 - 10		53/458 (11.6)	9.8 (6.4, 13.2)
	11 - 15		62/458 (13.5)	14.1 (9.6, 18.7)
	16 or more		327/458 (71.4)	73.6 (67.9, 79.3)
Reason for not having any sexual partners or clients in the past 30 days <sup>1</sup>	Could not find any clients		1/2 (50.0)	-
	I am not working as a sex worker anymore		0/2 (0.0)	-
	Don't know		1/2 (50.0)	-
Number of paying partners (clients)	Sample <i>M (SD)</i> = 24.4 (14.57) Mdn = 22.0 N = 451 Range = 0 - 98	Pop. est. <i>M (SD)</i> = 24.0 (13.92) Mdn = 22.0 - -		
	0		1/451 (0.2)	0.1 (0.0, 0.2)
	1 - 5		19/451 (4.2)	3.0 (1.4, 4.7)
	6 - 10		63/451 (14.0)	13.5 (9.0, 18.0)

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
	11 – 15		57/451 (12.6)	12.6 (8.5, 16.7)
	16 or more		311/451 (69.0)	70.8 (64.9, 76.6)
Had sex only with paying partners (clients)			172/451 (38.1)	34.2 (28.4, 40.0)
Use of condoms with paying partners (clients)	Every time		135/450 (30.0)	22.9 (17.1, 28.8)
	Almost every time		242/450 (53.8)	61.2 (55.2, 67.3)
	Sometimes		71/450 (15.8)	15.3 (11.6, 18.9)
	Never		2/450 (0.4)	0.6 (0.0, 1.3)
Mean number of days per week worked selling	Sample <i>M (SD)</i> = 4.8 (1.63) Mdn = 5.0 N = 451 Range = 1 – 7	Pop. est. <i>M (SD)</i> = 4.8 (1.53) Mdn = 5.0 - -		
	1 – 2		49/451 (10.9)	8.0 (4.7, 11.4)
	3		74/451 (16.4)	15.6 (11.5, 19.6)
	4 or more		328/451 (72.7)	76.4 (71.3, 81.4)
Mean number of paying partners (clients) per day	Sample <i>M (SD)</i> = 2.3 (1.63) Mdn = 2.0 N = 444 Range = 0 – 20	Pop. est. <i>M (SD)</i> = 2.2 (1.24) Mdn = 2.0 - -		
	0		3/444 (0.7)	0.5 (0.0, 1.2)
	1		96/444 (21.6)	20.5 (14.6, 26.4)
	2		234/444 (52.7)	55.9 (49.4, 62.3)
	3 or more		111/444 (25.0)	23.1 (18.1, 28.1)

When they first received money for sex, FSW in Colombo were on average twenty-two years old, with as many as one in ten (11.0%) of them being younger than 18 years of age. On average, FSW in Colombo have been working as sex workers for twenty years, with only about one in ten (11.2%) working as a sex worker for five years or less. On average, FSW in Colombo receive 1,447 Sri Lankan Rs. (9.3 USD) for sex, with as many as three-quarters (75.2%) of them receiving less than 1,500 Sri Lankan Rs. (10 USD) for sex. Finally, about one half (54.3%) of FSW in Colombo seek paying partners (clients) at outdoor places (sites such as streets, parks, bus stations, taxi stations, etc.). Typically, however, one in four (27.9%) FSW in Colombo finds paying partners (clients) at outdoor sites (in the street, park or public transport) and about the same share (28.8%) of FSW in Colombo typically find them in a brothel. A majority (59.1%) of FSW in Colombo typically have sex with paying partners (clients) at a hotel or guest house or at a brothel (34.8%).

**Table 21: Transactional Sex**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age when first received money for sex	Sample <i>M (SD)</i> = 21.9 (5.08) Mdn = 21.0 N = 451 Range = 12 - 50	Pop. est. <i>M (SD)</i> = 21.6 (4.87) Mdn = 21.0 - -		
			< 18 18 - 24 25 - 34 35 - 44 ≥ 45	45/451 (10.0) 305/451 (67.6) 83/451 (18.4) 15/451 (3.3) 3/451 (0.7)
Length of time working as a FSW	Sample <i>M (SD)</i> = 19.1 (10.83) Mdn = 19.0 N = 450 Range = 0 - 49	Pop. est. <i>M (SD)</i> = 20.0 (10.84) Mdn = 20.0 - -		
			0 - 5 6 - 10 11 - 15 16 - 20 21 or more	60/450 (13.3) 54/450 (12.0) 57/450 (12.7) 85/450 (18.9) 194/450 (43.1)
Amount of money typically received for sex (in Sri Lankan rupees)	Sample <i>M (SD)</i> = 1,457 (725) Mdn = 1,000 N = 451 Range = 100 - 5,000	Pop. est. <i>M (SD)</i> = 1,447 (664) Mdn = 1,500 - -		
			100 - 1,500 1,501 - 3,000 3,001 or more	340/451 (75.4) 103/451 (22.8) 8/451 (1.8)
Amount of money typically received for sex (in USD <sup>1</sup> )	Sample <i>M (SD)</i> = 9.4 (6.46) Mdn = 6.5 N = 451 Range = 0.65 - 32.3	Pop. est. <i>M (SD)</i> = 9.3 (4.29) Mdn = 9.69 - -		
			0.65 - 10 11 - 20 21 or more	340/451 (75.4) 103/451 (22.8) 8/451 (1.8)
Seeks paying partners (clients) at outdoor places (sites such as				233/458 (50.9)
				45.3 (39.0, 51.6)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
streets, parks, bus stations, taxi stations, etc.)			
Typically finds paying partners (clients)	Brothel	128/458 (27.9)	28.8 (23.0, 34.5)
	Bar, café, disco, or restaurant	6/458 (1.3)	1.3 (0.0, 2.7)
	Hotel	80/458 (17.5)	19.0 (13.5, 24.7)
	Street, park or public transport	143/458 (31.2)	27.9 (22.9, 32.8)
	Through friends	11/458 (2.4)	3.6 (0.6, 6.8)
	Internet (e.g. Facebook), chat, or SMS	17/458 (3.7)	4.2 (2.1, 6.2)
	Motel or Guest House	22/458 (4.8)	5.4 (2.6, 8.3)
	School	0/458 (0.0)	-
	Party	0/458 (0.0)	-
	Service station	0/458 (0.0)	-
	Through an intermediary (pimp, bartender, taxi driver)	5/458 (1.1)	0.8 (0.1, 1.6)
	Truck stop	1/458 (0.2)	0.2 (0.0, 0.4)
	Spa / Salon / Massage Parlour	25/458 (5.5)	4.4 (2.3, 6.5)
	Using a mobile phone (give phone number out to people)	19/458 (4.1)	3.9 (2.0, 5.8)
	Don't know	1/458 (0.2)	0.4 (0.0, 0.9)
Typically has sex with paying partners (clients) (multiple response)	At a brothel	161/458 (35.2)	34.8 (29.3, 40.3)
	At a hotel or guest house	272/458 (59.4)	59.1 (52.9, 65.3)
	At a massage parlor	44/458 (9.6)	10.2 (6.2, 14.2)
	At her own home	31/458 (6.8)	8.9 (5.0, 12.9)
	At the paying partner's (client's) home	37/458 (8.1)	10.1 (6.0, 14.1)
	In a car	19/458 (4.1)	4.3 (2.3, 6.4)
	In a park	20/458 (4.4)	4.1 (2.2, 6.0)
	Other location	0/458 (0.0)	-
	Don't know	1/458 (0.2)	0.4 (0.0, 1.0)

<sup>1</sup> Central Bank of Sri Lanka currency exchange rate on 28 February 2018 (1 USD = 154.74 Sri Lankan Rs.), available at [http://www.cbsl.gov.lk/htm/english/\\_cei/er/e\\_1.asp](http://www.cbsl.gov.lk/htm/english/_cei/er/e_1.asp)

At last sex with a paying partner (client) almost all (92.2%) of FSW in Colombo have used a condom. Among those who have not used a condom, the main reason was partner objecting to using a condom (60.8%) and as many as one in ten (12.5%) have not used a condom because they have not heard of condoms.

**Table 22: Last Paying Partner (Client)**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
GAM 3.6 Used a condom at last sex with a client	Yes	424/457 (92.8)	92.2 (88.9, 95.5)
	Don't remember	1/458 (0.2)	7.8 (4.5, 11.1)
Reasons for not using a condom (multiple response) <sup>1</sup>	Never heard of condoms	5/33 (15.2)	(12.5 (0.7, 23.8))
	Don't know how to obtain a condom	0/33 (0.0)	-
	I didn't think it was necessary	2/33 (6.1)	(4.4 (0.0, 10.3))
	I didn't think of it	1/33 (3.0)	(1.0 (0.0, 2.8))
	Not available	1/33 (3.0)	(1.2 (0.0, 3.1))
	Too expensive	1/33 (3.0)	(3.3 (0.0, 9.7))
	Partner objected	17/33 (51.5)	(60.8 (40.8, 80.8))
	Don't like them	3/33 (9.1)	(9.3 (0.0, 19.8))
	Used another contraceptive	1/33 (3.0)	(1.8 (0.0, 4.9))
	Used other prevention methods	0/33 (0.0)	-
	Partner was a faithful client	8/33 (24.2)	(22.7 (7.4, 38.6))
	Partner was a regular client	3/33 (9.1)	(7.5 (0.0, 16.0))
Condoms take away pleasure	2/33 (6.1)	(18.4 (0.0, 42.9))	
Nationality of the last paying partner (client)	Sri Lankan	455/457 (99.6)	99.5 (98.8, 100)
	Other <sup>1</sup>	1/457 (0.2)	0.1 (0.0, 0.4)
	Don't know	1/457 (0.2)	0.4 (0.0, 1.0)
	Rather not say	1/458 (0.2)	-
HIV status of the past paying partner (client)	HIV-negative	355/458 (77.5)	82.3 (78.1, 86.6)
	HIV-positive	0/458 (0.0)	-
	I did not know/ask	103/458 (22.5)	17.7 (13.4, 21.9)

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses. <sup>2</sup> European 1/1

Three in four (73.0%) FSW in Colombo have ever had a regular, non-paying sexual partner. Among those who have, in the month preceding the survey, FSW in Colombo have on average had three regular, non-paying sexual partners, with only 7.0% not having any regular, non-paying sexual partners in this period. When looking at only those FSW in Colombo who have had a regular, non-paying sexual partner in the month preceding the survey, one-fourth (22.3%) have consistently used condoms with their partner/s. Much more (78.6%) have, however, used a condom at last sex with a regular, non-paying sexual partner. Among those who have had a regular, non-paying sexual partner in the month preceding the survey and who have not used a condom at last sex, most FSW in Colombo did so because their partner objected (37.5%) or because their partner was faithful (36.6%).

**Table 23: Sexual activity with regular (non-paying) partners in the past 30 days**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Never had a regular (non-paying) partner		127/445 (28.5)	27.0 (21.4, 32.6)
Number of regular (non-paying) partners	Sample <i>M (SD)</i> = 3.2 (5.67) Mdn = 2.0 N = 318 Range = 0 – 65	Pop. est. <i>M (SD)</i> = 3.1 (4.29) Mdn = 2.0 -	
	0	31/318 (9.7)	7.0 (3.8, 10.2)
	1	83/318 (26.1)	23.4 (17.2, 29.5)
	2	93/318 (29.2)	30.9 (24.3, 37.6)
	3 or more	111/318 (34.9)	38.6 (31.6, 45.7)
Use of condoms with regular (non-paying) partner	Every time	71/287 (24.7)	22.3 (15.6, 29.0)
	Almost every time	145/287 (50.5)	56.2 (49.0, 63.4)
	Sometimes	54/287 (18.8)	16.6 (11.8, 21.3)
	Never	17/287 (5.9)	4.9 (2.3, 7.5)
Used a condom at last sex with a regular (non-paying) partner	Yes	220/286 (76.9)	78.6 (72.6, 84.7)
	Rather not say	1/287 (0.3)	-
Reasons for not using a condom (multiple response)	Never heard of condoms	3/66 (4.5)	6.1 (0.0, 14.0)
	Don't know how to obtain a condom	1/66 (1.5)	1.8 (0.0, 4.9)
	I didn't think it was necessary	9/66 (13.6)	8.3 (2.7, 13.9)
	I didn't think of it	10/66 (15.2)	9.3 (2.5, 16.3)
	Not available	8/66 (12.1)	8.6 (2.1, 15.0)
	Too expensive	1/66 (1.5)	1.8 (0.0, 4.8)
	Partner objected	18/66 (27.3)	37.5 (23.2, 52.4)
	Don't like them	5/66 (7.6)	7.7 (0.0, 15.5)
	Used another contraceptive	10/66 (15.2)	21.1 (9.6, 31.9)
	Used other prevention methods	1/66 (1.5)	3.0 (0.0, 7.8)
	Partner was faithful	23/66 (34.8)	36.6 (21.3, 52.3)
	Condoms take away pleasure	5/66 (7.6)	15.8 (1.3, 29.6)

Almost all (98.2%) FSW in Colombo have heard of condoms. Among them, most (99.6%) also know where to obtain condoms. Specifically, FSW in Colombo most often obtain condoms from pharmacies/chemists (47.3%) and from government STD clinics (44.0%). About one-third of FSW in Colombo also obtain condoms from neighbourhood markets/stands (33.8%). Importantly, only for two-thirds (65.9%) of FSW in Colombo condoms are affordable. About three-quarters of FSW in Colombo have ever heard of female condom (72.4%) and about half have ever heard of lubricant (44.8%). Among those who have ever heard of female condom, one-third have also ever used it (34.6%). Finally, among FSW in Colombo who have ever heard of lubricant, most (87.7%) use it at least rarely.

## Use of Condoms and Lubricants

**Table 24: Use of condoms and lubricants**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of condoms	Yes	449/457 (98.0)	98.2 (97.0, 99.4)
	Don't know	1/458 (0.2)	-
Knows where to obtain condoms	Yes	445/449 (99.1)	99.6 (99.2, 100)
	Rather not say		
Usually obtains condoms from: (multiple response)	Government clinic - STD clinic	200/445 (44.9)	44.0 (37.2, 50.7)
	Govt. clinic - Not STD clinic	23/445 (5.2)	7.7 (3.2, 12.2)
	Private clinic	37/445 (8.3)	12.4 (7.7, 17.1)
	Private pharmacy or chemist	224/445 (50.3)	47.3 (41.3, 53.2)
	Traditional healer/herbalist	3/445 (0.7)	0.4 (0.0, 1.0)
	Neighbourhood market/stand	126/445 (28.3)	33.8 (27.8, 39.7)
	Friends	47/445 (10.6)	13.4 (8.7, 18.3)
	Sex partner/s	53/445 (11.9)	12.8 (8.5, 17.0)
	Bar / Nightclub	6/445 (1.3)	1.3 (0.2, 2.3)
	NGOs/ outreach service	115/445 (25.8)	21.4 (17.1, 25.6)
	Service station(s)	47/445 (10.6)	9.5 (6.5, 12.4)
	I do not use condoms	1/445 (0.2)	0.1 (0.0, 0.2)
Affordability of male condoms	Affordable	274/449 (61.0)	65.9 (60.4, 71.4)
	Somewhat affordable	141/449 (31.4)	28.8 (23.6, 34.1)
	Not affordable	31/449 (6.9)	4.7 (2.9, 6.5)
	Don't know	3/449 (0.7)	0.5 (0.0, 1.2)
Ever heard of a female condom	Yes	320/456 (70.2)	72.4 (67.1, 77.6)
	Don't know	2/458 (0.4)	-
Ever used a female condom		114/320 (35.6)	34.6 (28.4, 40.9)
Ever heard of lubricants	Yes	188/455 (41.3)	44.8 (38.6, 51.0)
	Don't know	3/458 (0.7)	-
Frequency of lubricant use during vaginal or anal sex	Always	32/188 (17.0)	24.9 (15.2, 34.8)
	Usually	39/188 (20.7)	21.3 (13.4, 29.2)
	Sometimes	61/188 (32.4)	34.6 (25.9, 43.4)
	Rarely	16/188 (8.5)	7.0 (2.1, 11.8)
	Never	40/188 (21.3)	12.3 (6.9, 17.4)
Type of lubricant used (multiple response)	Glycerine	50/148 (33.8)	38.1 (27.4, 48.8)
	Saliva or water	27/148 (18.2)	19.2 (11.0, 27.5)
	Vaseline	51/148 (34.5)	33.0 (23.1, 43.0)
	Baby oil	54/148 (36.5)	39.0 (28.6, 49.4)
	Lotion	36/148 (24.3)	24.4 (15.1, 33.4)
	Other oil	17/148 (11.5)	12.2 (6.1, 18.3)
	Water-based	13/148 (8.8)	10.5 (2.8, 18.1)
	Silicone-based	13/148 (8.8)	5.4 (2.1, 8.7)
	Soap	1/148 (0.7)	0.3 (0.0, 0.8)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Whatever we get from peer educator(s), don't know what it is	1/148 (0.7)	0.5 (0.0, 1.2)
	Something else	1/148 (0.7)	0.3 (0.0, 0.8)

About two in three (65.6%) FSW in Colombo have ever heard of diseases that can be transmitted sexually. With regard to recognizing and describing symptoms of an STI, among those who have ever heard of diseases that can be transmitted sexually, most know that burning pain on urination and abdominal pain in women (66.9% and 57.5%, respectively) and burning pain on urination and genital discharge in men (54.9% and 49.6%, respectively) indicates a possible sexually transmitted infection. One in four (28.1%) FSW in Colombo has received an STI diagnosis in the year preceding the survey.

### Sexually Transmitted Infections

**Table 25: Sexually transmitted infections**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of diseases that can be transmitted sexually	Yes	306/452 (67.7)	65.6 (59.8, 71.3)
	Don't know	5/458 (1.1)	-
	Rather not say	1/458 (0.2)	-
Can describe symptoms of sexually transmitted infections in women (multiple response)	1. Abdominal pain	164/306 (53.6)	57.5 (50.7, 64.3)
	2. Abnormal genital discharge	142/306 (46.4)	52.9 (45.8, 60.1)
	3. Burning pain on urination	200/306 (65.4)	66.9 (60.0, 73.7)
	4. Genital ulcers or sores	98/306 (32.0)	33.0 (26.9, 39.0)
	5. Swelling in groin area	72/306 (23.5)	24.2 (17.8, 30.6)
	6. Itching	92/306 (30.1)	28.3 (22.0, 34.9)
	88. Don't know any	12/306 (3.9)	1.9 (0.7, 3.2)
	Symptoms mentioned (0-6)	0	12/306 (3.9)
1		13/306 (4.2)	4.0 (1.7, 6.3)
2		139/306 (45.4)	43.6 (36.3, 51.0)
3		101/306 (33.0)	35.2 (27.7, 42.6)
4		32/306 (10.5)	10.6 (6.5, 14.7)
5		8/306 (2.6)	4.5 (0.0, 8.9)
6		1/306 (0.3)	0.2 (0.0, 0.5)
Can describe symptoms of sexually transmitted infections in women (multiple response)	1. Genital discharge	160/306 (52.3)	49.6 (42.4, 56.8)
	2. Burning pain on urination	161/306 (52.6)	54.9 (48.1, 61.6)
	3. Genital ulcers or sores	93/306 (30.4)	37.8 (30.9, 44.7)
	4. Swelling in groin area	80/306 (26.1)	29.7 (22.9, 36.2)
	5. Itching	102/306 (33.3)	34.7 (27.3, 42.0)
	Don't know any	30/306 (9.8)	7.2 (4.2, 10.1)
Symptoms mentioned (0-6)	0	30/306 (9.8)	7.2 (4.1, 10.2)
	1	39/306 (12.7)	11.5 (7.1, 15.8)
	2	158/306 (51.6)	50.8 (43.6, 58.0)
	3	76/306 (24.8)	29.1 (22.5, 35.8)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	4	2/306 (0.7)	1.3 (0.0, 3.4)
	5	1/306 (0.3)	0.2 (0.0, 0.5)
Tested for sexually transmitted diseases in the past 3 months	Yes	137/452 (30.3)	31.0 (25.1, 37.0)
	Don't know	5/458 (1.1)	-
	Rather not say	1/458 (0.2)	-
Received an STI diagnosis in the past 12 months	Yes	66/305 (21.6)	28.1 (19.4, 37.0)
	Rather not say	1/306 (0.3)	-
Had a discharge or genital ulcer (sore) in the last 12 months	Yes	35/454 (7.7)	10.4 (6.6, 14.1)
	Don't know	3/458 (0.7)	-
	Rather not say	1/458 (0.2)	-
Sought treatment <sup>1</sup>		21/35 (60.0)	57.8 (36.6, 78.6)
Places where treatment was sought (multiple response) <sup>1</sup>	Government clinic - STD clinic	15/21 (71.4)	(77.0 (59.0, 95.2))
	Government clinic - Not STD clinic	2/21 (9.5)	(20.9 (0.0, 44.0))
		6/21 (28.6)	(23.4 (5.0, 41.8))
	Private clinic	0/21 (0.0)	-
	Private pharmacy or chemist	0/21 (0.0)	-
	Traditional healer/herbalist	0/21 (0.0)	-
	I used medicine or herbs from home		
Reasons for seeking treatment from that source (multiple response) <sup>1</sup>	Confidentiality	16/21 (76.2)	(80.3 (62.8, 97.7))
	Affordability	2/21 (9.5)	(13.1 (0.0, 32.2))
	Recommended by friend or acquaintance	7/21 (33.3)	(27.7 (7.6, 46.7))
	Quality and/or specialized care given at this place	0/21 (0.0)	-
	Knows the caregivers	0/21 (0.0)	-
	Known friendliness of the caregivers	0/21 (0.0)	-
	Proximity/location		
Reasons for not seeking treatment (multiple response) <sup>1</sup>	Didn't know where to go for treatment	10/13 (76.9)	-
	Embarrassed or afraid to seek treatment	2/13 (15.4)	-
		0/13 (0.0)	-
	Could not afford treatment	0/13 (0.0)	-
	Unable to get transportation	1/13 (7.7)	-
	Didn't think I needed it	2/13 (15.4)	-
	Don't know	1/14 (7.1)	-
	Rather not say		

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Prevention Programs

Among FSW in Colombo how had ever tested for HIV, four in five (80.4%) have at their last HIV testing told their counsellor/health care provider that they exchange sex for money. In addition, also four in

five (80.1%) were satisfied or very satisfied with the quality of services provided at the place where they received their last HIV test.

Most (81.1%) FSW told the healthcare provider that they exchanged sex for money the last time they sought treatment for an STI and most FSW were very satisfied (55.0%) or satisfied (45.0%) with how the healthcare provider treated them during their last visit.

**Table 26: Contact with healthcare providers**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
<b>STI treatment</b>			
Told the healthcare provider that they exchange sex for money when the last treatment for any symptom of an STI or a diagnosis for an STI was received <sup>1</sup>		16/21 (76.2)	(81.1 (65.6, 96.9))
Satisfaction with how the healthcare provider treated them during this last visit <sup>1</sup>	Very satisfied	10/21 (47.6)	(55.0 (32.2, 78.4))
	Somewhat satisfied	11/21 (52.4)	(45.0 (21.6, 67.8))
	Not satisfied	0/21 (0.0)	-
<b>HIV testing</b>			
Told the counsellor/health care provider that they exchange sex for money when last HIV test was received		205/252 (81.3)	80.4 (73.9, 86.7)
Satisfaction with the quality of services provided at the place where the last HIV test was received	Very satisfied	144/251 (57.4)	55.8 (48.8, 62.7)
	Satisfied	60/251 (23.9)	24.3 (18.2, 30.4)
	A little satisfied	44/251 (17.5)	18.9 (13.8, 24.1)
	Not satisfied	2/251 (0.8)	0.7 (0.0, 1.7)
	Don't know	1/251 (0.4)	0.3 (0.0, 0.9)
	Rather not say	1/252 (0.4)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

In the year preceding the survey, one in four (22.5%) FSW in Colombo had sought medical care, with a third (36.1%) of them experiencing any difficulty getting medical care when they sought it. Finally, about half (57.7%) of FSW in Colombo have ever been pregnant, although fewer than half of them (41.6%) visited an ANC for prenatal care during most recent pregnancy.

**Table 27: Use of healthcare services and pregnancy**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sought medical care for any reason in the past 12 months	Yes	113/453 (24.9)	22.5 (18.1, 26.7)
	Don't know	3/458 (0.7)	-
	Rather not say	2/458 (0.4)	-
Had difficulty getting medical care when they sought it		40/113 (35.4)	36.1 (26.2, 46.0)
Type of difficulty (multiple response) <sup>1</sup>	Too expensive	6/40 (15.0)	(14.2 (2.1, 26.6))
	Too far away	5/40 (12.5)	(9.5 (1.3, 17.8))
	Could not take time from work	11/40 (27.5)	(21.6 (7.2, 36.4))
	Long waiting times	24/40 (60.0)	(67.5 (51.1, 84.0))
Ever been pregnant	Yes	295/457 (64.6)	57.7 (51.1, 64.2)
	Don't know	1/458 (0.2)	-
Visited an ANC for prenatal care during most recent pregnancy	Yes	104/263 (39.5)	41.6 (32.3, 50.9)
	Don't know	32/295 (10.8)	-
Offered an HIV test at the ANC or maternity during most recent pregnancy	Yes	52/88 (59.1)	63.3 (46.6, 80.3)
	Don't know	16/104 (15.4)	-
HIV status during most recent pregnancy	Negative	201/295 (68.1)	71.4 (65.2, 77.8)
	Positive (Refer Note below)	2/295 (0.7)	2.3 (0.0, 4.9)
	Don't know	92/295 (31.2)	26.3 (20.0, 32.3)
Received a course of treatment that can prevent the baby from infection <sup>1</sup>	No	2/2 (100)	-
Baby received a dose/course of treatment to prevent infection <sup>1</sup>	No	2/2 (100)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses. Note: Two persons who said here they were positive were negative in the IBBS. Two positive cases from the IBBS said here that their test was negative.

Not many (23.4%) FSW in Colombo have been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the three months preceding the survey. Among those who have, most have received general HIV/STI prevention/transmission information (71.7%) or condoms and lubricants (70.8%). In addition, one in three (31.0%) FSW in Colombo has tested for an STI in the three months preceding the survey. Coverage by HIV prevention programs, defined as receipt of at least two interventions (i.e., Given condoms and lubricant; Counselling on condom use and safe sex; Received an STI test) in the past three months, remains low, at 12.5%.

**Table 28: Coverage of HIV prevention programs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the past 3 months	Yes	127/458 (27.7)	23.4 (18.3, 28.5)
Services received (multiple response)	General HIV/STI prevention/transmission information	86/127 (67.7)	71.7 (62.4, 81.0)
	Condoms and lubricants	91/127 (71.7)	70.8 (61.7, 80.0)
	Referral for STI treatment	25/127 (19.7)	25.1 (13.2, 36.4)
	Referral for VCT	11/127 (8.7)	9.5 (2.4, 16.6)
	Counselling on condom use and safe sex	68/127 (53.5)	43.9 (31.7, 56.3)
	Don't know	1/127 (0.8)	0.6 (0.0, 1.3)
Tested for sexually transmitted diseases in the past 3 months	Yes	137/452 (30.3)	31.0 (25.1, 37.0)
	Don't know	5/458 (1.1)	-
	Rather not say	1/458 (0.2)	-
GAM 3.7 Coverage of HIV prevention programs <sup>1</sup>		76/458 (16.6)	12.5 (8.7, 16.3)

<sup>1</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Received an STI test)

### Experiences of Discrimination and Violence on the basis of being a FSW

Many FSW in Colombo have been refused health care (16.6%) or police assistance (18.7%) on the basis of being a FSW. Verbal and sexual violence against them as well is high, with as many as one in three (31.7%) having experienced verbal insults and 10.9% having been hit, kicked, or beaten or sexually assaulted or raped, respectively. Among FSW in Colombo who have been sexually assaulted or raped, in most cases their assailant was a stranger (7.2%). Following the sexual assault/rape, only 22.3% of FSW in Colombo had sought medical treatment and 13.5% reported it to the police.

**Table 29: Experiences of Discrimination and Violence on the basis of being a FSW**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Refused health care	Yes	75/451 (16.6)	16.6 (12.9, 20.4)
	No	376/451 (83.4)	83.4 (79.6, 87.1)
	Don't know	5/458 (1.1)	-
	Rather not say	2/458 (0.4)	-
Refused police assistance	Yes	72/453 (15.9)	18.7 (13.9, 23.3)
	No	381/453 (84.1)	81.3 (76.7, 86.1)
	Don't know	3/458 (0.7)	-
	Rather not say	2/458 (0.4)	-
Verbally insulted	Yes	146/452 (32.3)	31.7 (26.4, 37.0)
	No	306/452 (67.7)	68.3 (63.0, 73.6)
	Don't know	5/458 (1.1)	-
	Rather not say	1/458 (0.2)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Hit, kicked, or beaten	Yes	51/453 (11.3)	10.9 (7.5, 14.1)
	No	402/453 (88.7)	89.1 (85.9, 92.5)
	Don't know	3/458 (0.7)	-
	Rather not say	2/458 (0.4)	-
Sexually assaulted or raped	Yes	47/458 (10.4)	10.9 (7.5, 14.4)
	No	405/458 (89.6)	89.1 (85.6, 92.5)
	Don't know	4/458 (0.9)	-
	Rather not say	2/458 (0.4)	-
Sexual assailant/rapist <sup>1</sup>	Stranger	34/47 (72.3)	(71.2 (50.5, 91.8))
	Social acquaintance	3/47 (6.4)	(4.3 (3.2, 5.2))
	Family/relative	1/47 (2.1)	(5.7 (2.6, 9.2))
	Police	2/47 (4.3)	(3.3 (2.3, 4.1))
	Paying sexual partner (Client)	6/47 (12.8)	(14.1 (0.0, 34.7))
	Other sex worker	0/47 (0.0)	
	Pimp	0/47 (0.0)	
	Non-paying partner or boyfriend/ girlfriend	1/47 (2.1)	(1.4 (0.9, 1.8))
Sought medical treatment for sexual assault/rape <sup>1</sup>		10/47 (21.3)	(22.3 (8.5, 36.1))
Reported sexual assault/rape to the police <sup>1</sup>		4/47 (8.5)	(13.5 (0.0, 27.7))

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Alcohol and Drugs

About one in three (32.5%) FSW in Colombo has ever had a drink containing alcohol, and among those who have, most have a drink containing alcohol about once a week (38.0%).

**Table 30: Alcohol consumption**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had a drink containing alcohol	Yes	154/458 (33.6)	32.5 (27.2, 37.8)
	Rather not say		
Alcohol consumption in the past month	I never drink alcohol	5/154 (3.2)	4.8 (0.0, 11.2)
	Never in the last 4 weeks	34/154 (22.1)	24.3 (14.2, 34.3)
	Every day	3/154 (1.9)	2.0 (0.0, 4.4)
	At least once a week	56/154 (36.4)	38.0 (27.5, 48.6)
	Less than once a week	54/154 (35.1)	28.5 (19.9, 36.8)
	Don't know	2/154 (1.3)	2.4 (1.9, 3.1)

A somewhat high share of FSW in Colombo in the year preceding the survey used non-prescribed/illicit drugs, namely heroin (9.0%), although only 4.8% ever had injected drugs for non-medical purposes.

**Table 31: Use of non-prescribed/illicit drugs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of drug used			
Heroin	<i>Frequency of consumption</i>		
	Have never used	381/449 (84.9)	88.8 (85.8, 91.8)
	Never in the past 12 months	3/449 (0.7)	0.5 (0.1, 0.9)
	Monthly or less	1/449 (0.2)	0.1 (0.0, 0.1)
	Several times a month	4/449 (0.9)	0.6 (0.0, 1.4)
	Two to four times a month	0/449 (0.0)	-
	Two to three times a week	7/449 (1.6)	1.1 (0.2, 2.1)
	Four or more times a week	46/449 (10.2)	7.2 (4.7, 9.6)
	Don't Know	7/449 (1.6)	1.7 (0.3, 3.0)
Rather not say	9/458 (2.0)	-	
Cannabis	<i>Frequency of consumption</i>		
	Have never used	428/445 (96.2)	96.2 (94.2, 98.2)
	Never in the past 12 months	5/445 (1.1)	1.2 (0.1, 2.4)
	Monthly or less	0/445 (0.0)	-
	Several times a month	0/445 (0.0)	-
	Two to four times a month	0/445 (0.0)	-
	Two to three times a week	0/445 (0.0)	-
	Four or more times a week	5/445 (1.1)	1.0 (0.0, 1.9)
	Don't Know	7/445 (1.6)	1.6 (0.2, 3.0)
Rather not say	13/458 (2.8)	-	
Cocaine	<i>Frequency of consumption</i>		
	Have never used	435/435 (97.3)	97.4 (96.0, 98.9)
	Never in the past 12 months	5/435 (1.1)	1.1 (0.3, 1.9)
	Monthly or less	0/435 (0.0)	-
	Several times a month	0/435 (0.0)	-
	Two to four times a month	0/435 (0.0)	-
	Two to three times a week	0/435 (0.0)	-
	Four or more times a week	2/435 (0.4)	0.4 (0.0, 1.0)
	Don't Know	5/435 (1.1)	1.1 (0.0, 2.1)
Rather not say	11/458 (2.4)	-	
Ecstasy	<i>Frequency of consumption</i>		
	Have never used	433/445 (97.3)	97.4 (96.1, 98.7)
	Never in the past 12 months	5/445 (1.1)	1.1 (0.3, 1.9)
	Monthly or less	0/445 (0.0)	-
	Several times a month	0/445 (0.0)	-
	Two to four times a month	0/445 (0.0)	-
	Two to three times a week	0/445 (0.0)	-
	Four or more times a week	2/445 (0.4)	0.4 (0.0, 1.1)
	Don't Know	5/445 (1.1)	1.1 (0.4, 1.8)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Rather not say	13/458 (2.8)	-
Amphetamines	<i>Frequency of consumption</i>		
	Have never used	429/445 (96.4)	96.4 (94.7, 98.1)
	Never in the past 12 months	5/445 (1.1)	1.1 (0.3, 1.9)
	Monthly or less	0/445 (0.0)	-
	Several times a month	0/445 (0.0)	-
	Two to four times a month	0/445 (0.0)	-
	Two to three times a week	0/445 (0.0)	-
	Four or more times a week	2/445 (0.4)	0.4 (0.0, 1.0)
	Don't Know	9/445 (2.0)	2.0 (0.7, 3.4)
	Rather not say	13/458 (2.8)	-
Opium	<i>Frequency of consumption</i>		
	Have never used	431/445 (96.9)	96.7 (95.0, 98.4)
	Never in the past 12 months	6/445 (1.3)	1.3 (0.5, 2.2)
	Monthly or less	1/445 (0.2)	0.1 (0.0, 0.2)
	Several times a month	0/445 (0.0)	-
	Two to four times a month	0/445 (0.0)	-
	Two to three times a week	0/445 (0.0)	-
	Four or more times a week	2/445 (0.4)	0.4 (0.0, 1.1)
	Don't Know	5/445 (1.1)	1.4 (0.1, 2.7)
	Rather not say	13/458 (2.8)	-
Hashish	<i>Frequency of consumption</i>		
	Have never used	427/444 (96.2)	95.4 (93.2, 97.5)
	Never in the past 12 months	5/444 (1.1)	1.1 (0.3, 1.9)
	Monthly or less	0/444 (0.0)	-
	Several times a month	0/444 (0.0)	-
	Two to four times a month	0/444 (0.0)	-
	Two to three times a week	0/444 (0.0)	-
	Four or more times a week	2/444 (0.5)	0.4 (0.0, 1.0)
	Don't Know	10/444 (2.3)	3.1 (1.2, 5.0)
	Rather not say	14/458 (3.1)	-
Other drugs	<i>Frequency of consumption</i>		
	Have never used	416/444 (93.7)	94.6 (92.4, 96.8)
	Never in the past 12 months	5/444 (1.1)	1.1 (0.0, 2.2)
	Monthly or less	5/444 (1.1)	0.9 (0.1, 1.7)
	Several times a month	1/444 (0.2)	0.1 (0.0, 0.4)
	Two to four times a month	0/444 (0.0)	-
	Two to three times a week	2/444 (0.5)	0.1 (0.0, 0.4)
	Four or more times a week	6/444 (1.4)	1.0 (0.1, 1.8)
	Don't Know	9/444 (2.0)	2.2 (0.7, 3.6)
	Rather not say	14/458 (3.1)	-

**Table 32: Use of non-prescribed/illicit drugs by injection**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever injected drugs for non-medical purposes	Yes	12/412 (2.9)	4.8 (1.5, 8.2)
	No	400/412 (97.1)	95.2 (91.8, 98.5)
	Don't know <sup>1</sup>	43/458 (9.4)	-
	Rather not say	3/458 (0.7)	-
Ever used non-sterile injecting equipment when injecting drugs <sup>2</sup>		2/12 (16.7)	-
3.8 Safe injecting practice <sup>2,3</sup>		3/12 (25.0)	-

<sup>1</sup> There is a chance that some participants did not understand this question. <sup>2</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses. <sup>3</sup> % Used a sterile needle and syringe at last injection

**Table 33: Use of non-prescribed/illicit drugs by injection in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Injected drugs for non-medical purposes in the past 12 months <sup>1</sup>		5/12 (41.7)	-
Frequency of injecting drugs <sup>1</sup>	Monthly or less	0/5 (0.0)	-
	Two to four times a month	0/5 (0.0)	-
	Two to three times a week	2/5 (40.0)	-
	Four or more times a week	3/5 (60.0)	-
Type of drug that was injected (multiple response) <sup>1</sup>	1. Heroin	4/5 (80.0)	-
	2. Cocaine	0/5 (0.0)	-
	3. Crack cocaine	0/5 (0.0)	-
	4. Churus/Ash	0/5 (0.0)	-
	5. Meth/amphetamine	0/5 (0.0)	-
	6. Ganja Mal	0/5 (0.0)	-
	7. Methadone	0/5 (0.0)	-
	8. Kerala Ganja	0/5 (0.0)	-
	9. Ganja	0/5 (0.0)	-
	10. Sudol (tablet)	0/5 (0.0)	-
	11. Rifernol (tablet)	0/5 (0.0)	-
Other (morphine)	1/5 (20.0)	-	

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

Regarding media use, FSW in Colombo most frequently watch TV (most days or every day: 85.5%) or listen to the radio (most days or every day: 75.1%). Very few read the newspaper (never: 65.2%) or use the Internet (never: 76.2%). Finally, most (88.6%) of FSW in Colombo have a mobile phone.

## Use of Media

**Table 34: Use of media in the past 30 days**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Radio	Never	84/458 (18.3)	13.3 (9.7, 17.0)
	Once a month	12/458 (2.6)	2.4 (0.9, 3.9)
	Once a week	39/458 (8.5)	9.1 (5.6, 12.6)
	Most days	233/458 (50.9)	59.4 (53.6, 65.2)
	Every day	90/458 (19.7)	15.7 (12.0, 19.4)
TV	Never	57/458 (12.4)	8.2 (5.9, 10.6)
	Once a month	7/458 (1.5)	1.4 (0.2, 2.6)
	Once a week	23/458 (5.0)	5.0 (2.5, 7.5)
	Most days	243/458 (53.1)	62.9 (57.1, 68.5)
	Every day	128/458 (27.9)	22.6 (17.9, 27.3)
Newspaper	Never	296/457 (64.8)	65.2 (59.7, 70.5)
	Once a month	31/457 (6.8)	5.9 (3.5, 8.3)
	Once a week	71/457 (15.5)	15.3 (11.3, 19.3)
	Most days	48/457 (10.5)	12.0 (7.8, 16.1)
	Every day	10/457 (2.2)	1.3 (0.5, 2.1)
	Don't know	1/457 (0.2)	0.4 (0.0, 1.0)
	Rather not say	1/458 (0.2)	-
Internet	Never	358/458 (78.2)	76.2 (71.7, 80.8)
	Once a month	11/458 (2.4)	2.5 (1.0, 4.0)
	Once a week	18/458 (3.9)	4.4 (2.3, 6.5)
	Most days	48/458 (10.5)	12.6 (8.5, 16.7)
	Every day	22/458 (4.8)	3.9 (2.2, 5.5)
	Don't know	1/458 (0.2)	0.4 (0.0, 1.0)
Has a mobile phone		382/458 (83.4)	88.6 (85.8, 91.5)

## Multiplier questions

In June or July 2017, 31.4% of FSW in Colombo have received any services (educational leaflets, condoms, HIV counselling) from the NGO Abhimani. Somewhat fewer (29.0%) have received condoms from the same NGO and 21.9% were escorted by NGO Abhimani's staff to an STI clinic. One in ten (10.6%) has received a purse by peer educators during their outreach work in October/November 2017.

**Table 35. Multiplier questions**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Received any services (educational leaflets, condoms, HIV counselling) from the NGO Abhimani in Colombo in May, June or July 2017	Yes	157/436 (35.8)	31.4 (25.6, 37.2)
	No	282/436 (64.2)	68.6 (62.8, 74.4)
	Don't know	19/458 (4.1)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Received condoms from the condoms from the NGO Abhimani in Colombo in May, June or July 2017	Yes	145/436 (33.3)	29.0 (23.5, 34.6)
	No	291/436 (66.7)	71.0 (65.5, 76.5)
	Don't know	22/458 (4.8)	-
Escorted to an STI clinic by the staff of the NGO Abhimani in Colombo in May, June or July 2017	Yes	112/437 (25.6)	21.9 (16.2, 27.6)
	No	325/437 (74.4)	78.1 (72.4, 83.8)
	Don't know	21/458 (4.6)	-
Received a purse by peer educators (staff of the NGO Abhimani in Colombo) in the week of 30 October-5 November 2017 during their outreach work	Yes	63/434 (14.5)	10.2 (5.4, 14.9)
	No	371/434 (85.5)	89.8 (85.1, 94.6)
	Don't know	24/458 (5.2)	-
Participated in the first IBBS in Sri Lanka in 2014 <sup>1</sup>	Yes	50/392 (12.8)	10.6 (7.2, 14.0)
	Don't know	10/403 (2.5)	-
	Rather not say	1/403 (0.2)	-
	In Colombo	50/50 (100)	-
	In Kandy	-	-
	In Galle	-	-

<sup>1</sup> Question added after fieldwork had started (55 respondents did not provide an answer)

### 3.1.2. Galle

A total of 360 FSW respondents were recruited in Galle, including 4 seeds. For estimates, Gile's SS with population size estimate of 1,754 was used (low estimate = 324; high estimate = 2,859), along with 0.95 confidence intervals, and 5,000 bootstraps. Across the tables presented below, because estimates based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Homophily and Convergence

As previously mentioned, a homophily value of one means no homophily, while values above one show the presence of positive homophily (e.g. people are recruiting similar to themselves), and values below 1 mean negative homophily (e.g. people are recruiting different from themselves). In the FSW Colombo sample, the homophily ranged from 0.94 to 1.43, overall this can be interpreted as weak homophily. Convergence was reached on all key indicators, with the population estimates becoming stable around the 200<sup>th</sup> participant. For the indicator of avoidance of HIV services, that is measured only among those participants who did not receive an HIV test, convergence was reached around the 75<sup>th</sup> participant.

**Table 36: Homophily analysis**

	<i>Target indicator</i>	<i>Recruitment homophily</i>	<i>Estimated population homophily</i>
1	HIV prevalence among FSW (% HIV positive) <sup>1</sup>	-	-
2	Active syphilis among FSW <sup>2</sup>	-	-
3	Viral hepatitis among FSW (HBV) <sup>1</sup>	-	-
4	HIV and hepatitis co-infection among FSW <sup>1</sup>	-	-
5	Knowledge of HIV status among FSW (% Know HIV status from an HIV test) <sup>3</sup>	1.10*	1.18
6	Coverage of HIV prevention programs among FSW <sup>4</sup> (% Reached with HIV/AIDS prevention programs)	(1.03)	-
7	Condom use among FSW (% Used a condom the last time they had sex with a client)	0.99	1.07
8	Discriminatory attitudes towards PLHIV <sup>5</sup> (% who answer 'No' to at least one of the two questions)	(0.98)	-
9	Avoidance of HIV services because of stigma and discrimination among FSW <sup>7</sup> (% who answer 'Yes' to at least one of the reasons)	(1.17)	-
10	Age (% Mdn+)	0.99	0.94
11	Income (% 20,000 Rs.+)	1.23*	1.43

<sup>1</sup> Not calculated because there were not any positive case. <sup>2</sup> Not calculated because there were two positive cases. <sup>3</sup> Tested and positive or tested in the past 12 months and negative. <sup>4</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Tested for STI). <sup>5</sup> Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?; Do you think that children living with HIV should be able to attend school with children who are HIV negative?. <sup>7</sup> Did not seek HIV testing/prevention/treatment services because of: Fear of or concern about stigma by staff or neighbours; Fear of or concern about or experienced violence; Fear of or concern about or experienced police harassment or arrest. This indicator has changed. Please see Global AIDS Monitoring 2018, pg. 96.

\*  $p < .05$

### Recruitment

Recruitment started with two initial respondents (seeds), with two additional seeds included into the study in the middle of fieldwork. Among them, two seeds were almost equally productive, accounting for 43.3 and 31.1% of the sample, respectively. The other two seeds were somewhat less productive, with recruitment through them ranging from 7.5% to 18.1% of the total sample.

Figure 6. Recruitment tree – FSW Galle

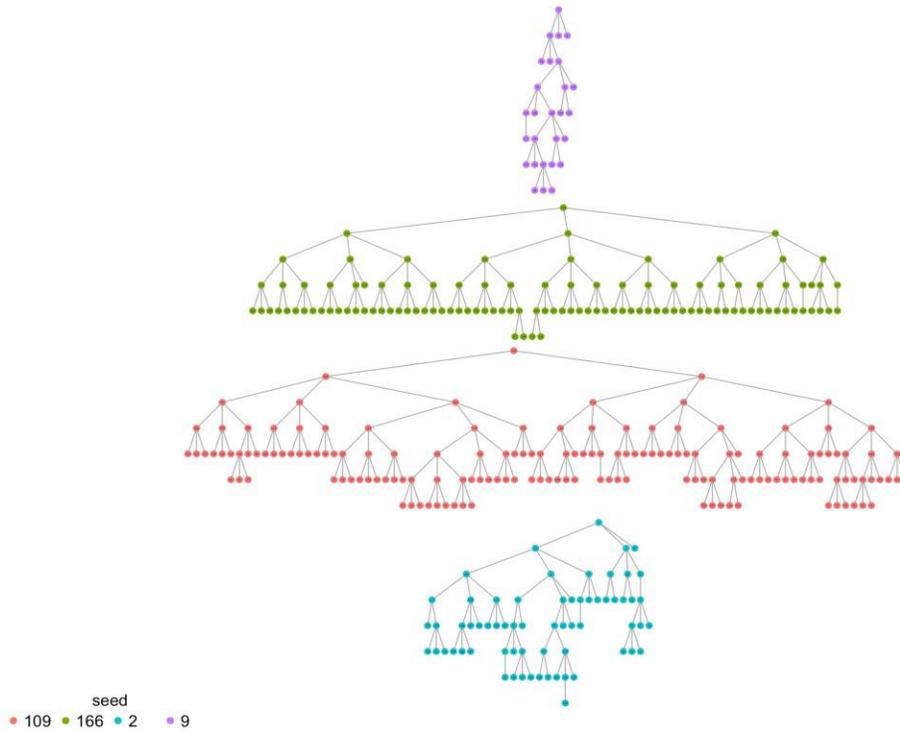


Table 37: Recruitment information

Characteristic	Responses	Sample proportion n/N (%)
Main reason for participation	Interest in HIV and sexual health	44/360 (12.2)
	HIV test	223/360 (61.9)
	Interest in issues related to FSW	8/360 (2.2)
	Helping the community	2/360 (0.6)
	Friend wanted me to participate	83/360 (23.1)
	Someone forced me	0/360 (0.0)
	Incentive/Gift	0/360 (0.0)
Mode of receiving the coupon	Received the coupon from a friend/acquaintance	356/360 (98.9)
	Found the coupon laying around somewhere	0/360 (0.0)
	Bought or exchanged it for something	0/360 (0.0)
	Seed (from the IBBS office)	4/360 (1.1)
Acquaintances for:	< 6 months	19/356 (5.3)
	6 months – 1 year	91/356 (25.6)
	> 1 year	246/356 (69.1)
Screener’s confidence that participant is FSW	Confident	358/360 (99.4)
	Somewhat confident	2/360 (0.6)

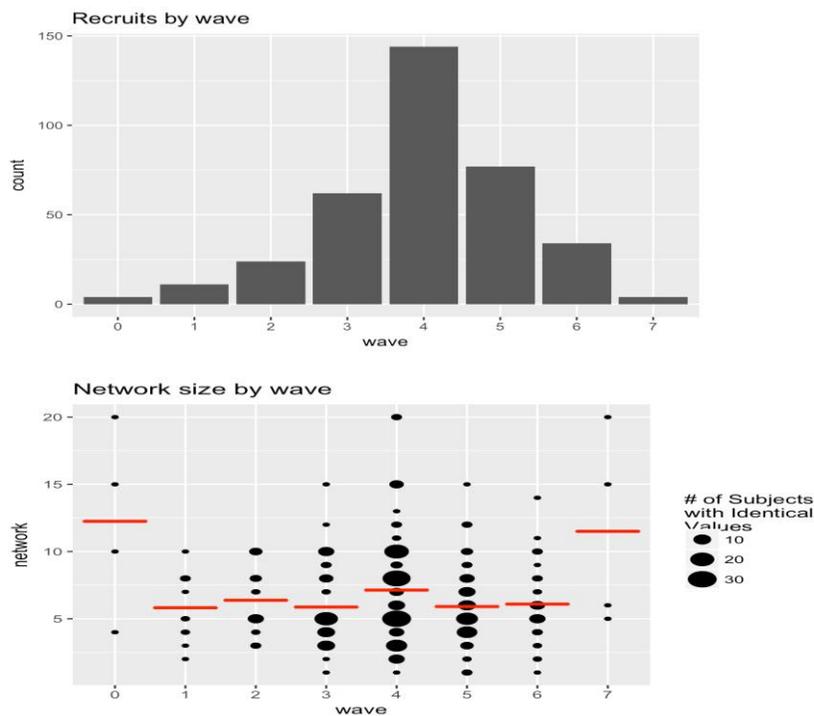
On average, study participants knew about ten other FSW. When asked how many of the FSW they knew who were at least 18 years of age, who lived in Galle, and who they have seen in the past one month, on average, study participants knew six other FSW.

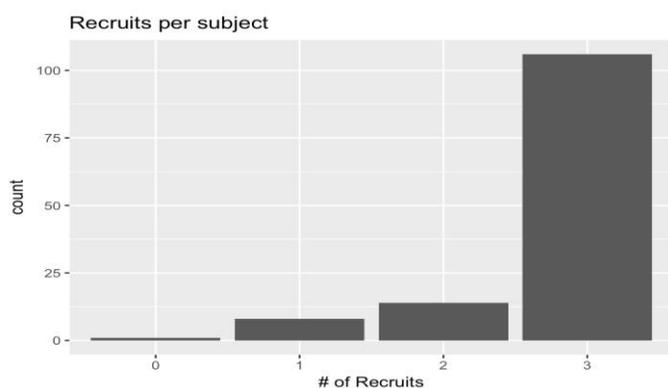
**Table 38: Network size questions**

Characteristic	Sample statistics
How many women do you know (they know your name and you know theirs), who have sold sex in the last 12 months?	$M (SD) = 11.3 (7.38)$ Mdn = 10 Range = 1 - 50
Of these ___ [number in the previous question] women that you mentioned in the answer to the previous question, how many are above the age of 18?	$M (SD) = 10.8 (6.81)$ Mdn = 10 Range = 1 - 46
Of these ___ [number in the previous question] women that you mentioned in the answer to the previous question, how many live, work or study in _____ [city of survey]?	$M (SD) = 9.3 (5.42)$ Mdn = 8 Range = 1 - 35
Of these ___ [number in the previous question] women that you mentioned in the answer to the previous question, how many have you seen in the past 1 month? <sup>1,2</sup>	$M (SD) = 6.6 (3.36)$ Mdn = 6 Range = 1 - 20

<sup>1</sup> Three respondents answered with zero. Their answers were changed to one. <sup>2</sup> In the estimation of population frequencies and statistics, this question was used as the network size question.

**Figure 7. Recruitment diagnostics – FSW Galle**





A total of seven waves was reached among FSW in Galle, with the majority of respondents recruited in waves four and five (40.0 and 21.4%, respectively). As is expected, the mean network size is the highest in wave zero and lower in subsequent waves, ranging from 12 in wave zero to 5-7 in all subsequent waves, except for the final, wave seven, in which due to a small number of recruits the average network size is much higher, at 12. Overall, recruitment in Galle went well, with a majority of study participants recruiting in the study three other FSW.

## Biological Indicators

**Table 39: Biological test results**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Positive for HIV		0/360 (0.0)	-
Positive for syphilis (VDRL)	Reactive	1/359 (0.3)	0.7 (0.0, 1.6)
	Weakly reactive	1/359 (0.3)	0.4 (0.0, 1.3)
Positive for syphilis (TPPA)		4/360 (1.1)	2.0 (0.0, 4.6)
Positive for syphilis (onsite testing)		4/360 (1.1)	2.0 (0.0, 4.6)
Positive for hepatitis B surface antigen		0/360 (0.0)	-
HIV and hepatitis co-infection		0/360 (0.0)	-

## Socio-Demographic Characteristics

All FSW in Galle were born in Sri Lanka and have Sri Lankan citizenship. District of residence in the past year has for a majority of them been Galle (99.8%).

**Table 40: Citizenship and Residence**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Citizenship	Sri Lankan	360/360 (100)	-
Country of birth	Sri Lanka	360/360 (100)	-
District of residence in the past year	Galle	359/360 (99.7)	99.8 (99.5, 100)
	Other	1/360 (0.3)	0.2 (0.0, 0.5)
Primary residence is Galle	Yes	317/360 (88.1)	92.1 (90.2, 94.1)
	Don't know	43/360 (11.9)	7.9 (5.9, 9.8)

Mean age of FSW in Galle is 40.1 years, with as many as one-third (32.9%) at least 45 years of age. With regard to ethnicity and language spoken at home, almost all (97.5 and 98.3%, respectively) of FSW in Galle are Sinhalese. About one in ten FSW in Galle cannot read and write (11.4%) although fewer have never attended formal education (5.0%). Two-thirds (64.7%) of FSW in Galle have a source of income other than sex work and a majority earns less than 30,000 Sri Lankan Rupees per month (194 USD). According to the last available World Bank data for 2016, GNI per capita is in Sri Lanka 3,850 USD. Similarly, compared to the general population in Sri Lanka, among which 10.4% was in 2011 living at 5.50 USD per day, a majority of FSW in Galle is likely living in poverty.

**Table 41: Core socio-demographic indicators**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Age	Sample $M (SD) =$ 39.0 (10.70) Mdn = 37.0 N = 360 Range = 18 – 69	Pop. est. $M (SD) =$ 40.1 (11.01) Mdn = 39.0 - -	
Age groups	18 – 24	20/360 (5.6)	5.3 (3.1, 7.6)
	25 – 34	121/360 (33.6)	30.3 (25.3, 35.3)
	35 – 44	117/360 (32.5)	31.4 (26.4, 36.4)
	≥ 45	102/360 (28.3)	32.9 (27.3, 38.5)
Sex	Woman	360/360 (100)	-
Sex same as at birth		360/360 (100)	-
Ethnicity	Sinhalese	347/360 (96.4)	97.5 (96.2, 98.7)
	Sri Lankan Tamil	11/360 (3.1)	2.0 (0.9, 3.2)
	Indian Tamil	0/360 (0.0)	-
	Moor/Muslim	2/360 (0.6)	0.5 (0.0, 1.0)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Burgher	0/360 (0.0)	-
	Malay	0/360 (0.0)	-
	Other	0/360 (0.0)	-
Languages spoken at home (multiple response)	Sinhalese	352/360 (97.8)	98.3 (97.5, 99.1)
	Tamil	10/360 (2.8)	1.8 (0.7, 3.0)
	English	0/360 (0.0)	-
	Other	0/360 (0.0)	-
Can read and write	Yes	321/360 (89.2)	88.6 (84.4, 92.9)
Completed level of education	Never attended school	19/360 (5.3)	5.0 (2.9, 7.2)
	Grade 1-5	45/360 (12.5)	14.8 (9.9, 19.7)
	Grade 6-10	170/360 (47.2)	48.1 (42.5, 53.8)
	Passed O/L	100/360 (27.8)	25.0 (20.4, 29.5)
	Passed A/L	23/360 (6.4)	5.4 (3.2, 7.5)
	Completed Diploma	2/360 (0.6)	0.4 (0.0, 0.8)
	Completed Degree	1/360 (0.3)	1.3 (0.0, 3.0)
Earns money doing anything other than sex work (i.e., has other sources of income)	Yes	222/357 (62.2)	64.7 (59.5, 69.8)
	Rather not say	3/360 (0.8)	-
Main activity	In paid work (including parental or other leave)	155/356 (43.5)	47.4 (41.0, 53.8)
		122/356 (34.3)	26.9 (22.8, 31.1)
	Occasional work <sup>1</sup>	15/356 (4.2)	3.1 (1.7, 4.4)
	In unpaid or voluntary work	64/356 (18.0)	22.6 (16.9, 28.2)
	Unemployed	0/356 (0.0)	-
	Student	0/356 (0.0)	-
	Retired	0/356 (0.0)	-
	Rather not say	4/360 (1.1)	-
Income <sup>2</sup>	< 5,000 Rupees	14/354 (4.0)	6.4 (2.1, 10.7)
	5,000-10,000	36/354 (10.2)	13.0 (7.9, 18.1)
	10,001-20,000	73/354 (20.6)	20.7 (16.0, 25.4)
	20,001-30,000	113/354 (31.9)	32.3 (26.6, 38.0)
	30,001-40,000	66/354 (18.6)	16.0 (12.1, 19.9)
	> 40,000 Rupees	52/354 (14.7)	11.5 (8.1, 14.9)
	Rather not say	6/360 (1.7)	-

<sup>1</sup> Eleven respondents mentioned several different activities that they perform (e.g., sewing); their answers were recoded to 'occasional work'; <sup>2</sup> Central Bank of Sri Lanka currency exchange rate on 28 February 2018 (1 USD = 154.74 Sri Lankan Rs.), available at [http://www.cbsl.gov.lk/htm/english/\\_cei/er/e\\_1.asp](http://www.cbsl.gov.lk/htm/english/_cei/er/e_1.asp)

Two-thirds of FSW in Galle live in their own home (64.4%) and another 18.6% live in their parents' home. On average, FSW in Galle live with three other people. A majority of FSW in Galle are married (77.6%), and about one in ten FSW in Galle is not in a relationship (9.6%). Three-quarters of FSW in Galle have at least one child (76.1%).

**Table 42: Household information and family life**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Type of residence	Temporary shelter		36/360 (10.0)	8.6 (5.0, 12.1)
	Boarding house		27/360 (7.5)	6.9 (4.5, 9.3)
	Parents' home		86/360 (23.9)	18.6 (14.8, 22.5)
	My own home		204/360 (56.7)	64.4 (59.4, 69.5)
	Lodging		2/360 (0.6)	0.6 (0.0, 1.2)
	On the street		1/360 (0.3)	0.2 (0.0, 0.4)
	Brothel		4/360 (1.1)	0.7 (0.1, 1.3)
Number of household members	Sample <i>M (SD)</i> = 4.2 (1.63) Mdn = 4.0 N = 339 Range =	Pop. est. <i>M (SD)</i> = 4.2 (1.7) Mdn = 4.0 - -		
Number of children currently living in the household	No children		126/337 (37.4)	37.5 (31.7, 43.3)
	One		136/337 (40.4)	37.2 (31.5, 42.9)
	Two		56/337 (16.6)	17.8 (13.5, 22.2)
	Three or more		19/337 (5.6)	7.4 (3.9, 11.0)
	Don't know/Rather not say		23/360 (6.4)	-
Number of children	No children		85/337 (25.2)	23.9 (19.1, 28.9)
	One		112/337 (33.2)	30.3 (24.8, 35.9)
	Two		84/337 (24.9)	25.5 (20.6, 30.3)
	Three or more		56/337 (16.6)	20.3 (15.0, 25.5)
	Don't know/Rather not say		23/360 (6.4)	-
Marital status	Single (Never married)		31/359 (8.6)	7.7 (5.3, 10.1)
	Married		259/359 (72.1)	77.6 (73.4, 81.6)
	Divorced/Separated		43/359 (12.0)	8.9 (6.3, 11.5)
	Widowed		26/359 (7.2)	5.9 (3.8, 8.0)
	Rather not say		1/360 (0.3)	-
Cohabitation	Living together with a partner/spouse		230/358 (64.2)	70.7 (65.8, 75.4)
	Involved in a relationship without living together		89/358 (24.9)	19.7 (15.9, 23.6)
	Have no relationship/Do not have a partner		39/358 (10.9)	9.6 (6.9, 12.5)
	Rather not say		2/360 (0.6)	-
Sex of partner	Woman		36/319 (11.3)	11.3 (7.2, 15.4)
	Man		283/319 (88.7)	88.7 (84.6, 92.8)

Only two-thirds of FSW in Galle have ever heard of HIV/AIDS (67.3%) and among them, the most common sources of the thorough information about HIV/AIDS are health services (28.8%), NGOs (28.7%), and schools (28.7%). Among FSW in Galle who have heard of HIV/AIDS, two-thirds (65.4%) have never discussed HIV/AIDS with any of their partners.

## HIV/AIDS

**Table 43: General knowledge about HIV/AIDS**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has heard of HIV/AIDS	Yes	227/354 (64.1)	67.3 (61.9, 72.7)
	No	127/354 (35.9)	32.7 (27.3, 38.1)
	Don't know	6/360 (1.7)	-
Main source of the most thorough understanding of HIV/AIDS	School	57/227 (25.1)	28.7 (22.3, 35.4)
	Health services	62/227 (27.3)	28.8 (21.6, 36.1)
	Workplace	2/227 (0.9)	0.8 (0.0, 1.6)
	Friends/Family	20/227 (8.8)	5.8 (2.9, 8.5)
	Television	6/227 (2.6)	2.2 (0.4, 4.0)
	Newspaper/Magazines	7/227 (3.1)	1.9 (0.6, 3.0)
	Posters/Billboards	3/227 (1.3)	1.2 (0.3, 2.0)
	Pamphlets/Leaflets	5/227 (2.2)	28.7 (20.6, 36.7)
	Radio	0/227 (0.0)	-
Discussed HIV with any sexual partner	Yes, all	12/227 (5.3)	5.5 (0.8, 10.3)
	Yes, some	33/227 (14.5)	20.9 (12.0, 30.2)
	No, none	164/227 (72.2)	65.4 (54.6, 75.7)
	Don't know	18/227 (7.9)	8.1 (4.5, 11.8)
Partner ever disclosed their HIV status	Yes, all	11/45 (24.4)	19.7 (3.6, 35.4)
	Yes, some	21/45 (46.7)	48.6 (32.4, 65.0)
	No, none	10/45 (22.2)	27.1 (3.3, 51.3)
	Don't know	3/45 (6.7)	4.6 (0.0, 12.9)
Knows somebody who is HIV-positive or has died of AIDS	Yes	16/227 (7.0)	5.9 (0.8, 10.9)
Close friend or relative died of AIDS	Yes, close relative	0/227 (0.0)	-
	Yes, close friend	3/227 (1.3)	0.5 (0.0, 0.9)
	Yes, close relative and close friend	0/227 (0.0)	-
	No	176/227 (77.5)	74.4 (67.8, 80.9)
	Don't know	48/227 (21.1)	25.1 (18.7, 31.7)

One in five FSW in Galle cannot gauge her personal risk of HIV (20.7%). Among FSW in Galle who perceive their personal HIV risk as low or none (58.9%), a majority (90.0%) believe so because they always use condoms. FSW in Galle who perceive their personal HIV risk as moderate or high (20.4%) believe so because they do not always use condoms (26.8%) or because they have had many sexual partners (75.4%).

**Table 44: Perception of personal HIV risk**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Personal HIV risk	No risk	169/360 (46.9)	55.0 (49.5, 60.5)
	Low risk	13/360 (3.6)	3.9 (1.9, 6.0)
	Moderate risk	32/360 (8.9)	6.2 (4.3, 8.2)
	High risk	69/360 (19.2)	14.2 (11.1, 17.2)
	Don't know	77/360 (21.4)	20.7 (16.3, 25.0)
Reasons for perceiving the risk as moderate or high (multiple response)	Many sexual partners	72/101 (71.3)	75.4 (68.0, 83.0)
	Didn't always use condoms	27/101 (26.7)	26.8 (16.6, 37.4)
	Injected drugs	0/101 (0.0)	-
	Partner has other partners	39/101 (38.6)	33.1 (23.9, 42.6)
Reasons for perceiving no or low risk (multiple response)	Trust my partner/s	9/182 (4.9)	4.3 (1.7, 7.0)
	Always use condoms	164/182 (90.1)	90.0 (85.6, 94.5)
	Don't know	12/182 (6.6)	6.3 (2.8, 9.8)

Among FSW who have ever heard of HIV/AIDS, less than half (41.5%) can correctly identify modes of sexual transmission of HIV and reject major misconceptions about transmission HIV. When looking at specific items that the composite indicator consists of, most of FSW in Galle know that the risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners (61.0%) and that a person cannot get HIV by sharing food with someone who is infected (59.0). Somewhat fewer, 54.0% also know that risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners.

**Table 45: GAM 5.1 Knowledge about HIV prevention**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners	<u>Among all</u> Yes	171/354 (48.3)	54.0 (49.9, 58.1)
	<u>Among those aged 18 – 24<sup>2</sup></u> Yes	13/20 (65.0)	(61.0 (43.0, 78.1))
Person can reduce the risk of getting HIV by using a condom every time he/she has sex	<u>Among all</u> Yes	189/353 (53.5)	59.2 (55.2, 63.1)
	<u>Among those aged 18 – 24<sup>2</sup></u> Yes	12/20 (60.0)	(57.6 (39.6, 74.8))
Healthy-looking person can have HIV	<u>Among all</u> Yes	191/354 (54.0)	57.2 (53.0, 61.3)
	<u>Among those aged 18 – 24<sup>2</sup></u> Yes	13/20 (65.0)	(60.4 (42.8, 78.0))
Person can get HIV from mosquito bites	Among all No	190/354 (53.7)	58.4 (54.5, 62.4)
	<u>Among those aged 18 – 24<sup>2</sup></u> No	12/20 (60.0)	(57.6 (39.3, 74.3))
Person can	<u>Among all</u>		

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
get HIV by sharing food with someone who is infected	No	190/354 (53.7)	59.0 (55.1, 62.9)
	<u>Among those aged 18 - 24<sup>2</sup></u> No	12/20 (60.0)	(57.6 (39.6, 74.9))
GAM 5.1 Composite indicator for knowledge about HIV prevention (1-5 <sup>1</sup> )	<u>Among all</u> # of correct answers		
	None	131/354 (37.0)	33.8 (28.5, 39.2)
	One	11/354 (3.1)	2.2 (1.0, 3.4)
	Two	17/354 (4.8)	3.5 (1.9, 5.1)
	Three	23/354 (6.5)	5.0 (2.9, 7.0)
	Four	43/354 (12.1)	14.0 (9.3, 18.7)
	Five	129/354 (36.4)	41.5 (35.9, 47.1)
	<u>Among those aged 18 - 24<sup>2</sup></u> # of correct answers		
	None	6/20 (30.0)	(36.1 (11.7, 61.0))
	One	1/20 (5.0)	(2.9 (0.0, 6.2))
	Two	1/20 (5.0)	(3.5 (0.0, 8.4))
	Three	0/20 (0.0)	-
	Four	1/20 (5.0)	(3.5 (0.0, 8.4))
	Five	11/20 (55.0)	(54.0 (30.2, 78.9))
HIV can be transmitted from mother to her unborn child	Yes	257/360 (71.4)	74.5 (69.6, 79.3)
	No	52/360 (14.4)	12.8 (9.0, 16.6)
	Don't know	51/360 (14.2)	12.7 (9.1, 16.4)
Ever heard of ART	Yes	70/360 (19.4)	22.8 (17.3, 28.4)
	No	245/360 (68.1)	65.3 (59.5, 71.0)
	Don't know	45/360 (12.5)	11.9 (8.3, 15.5)

<sup>1</sup> Don't know is recorded as incorrect. Numerator for individual and the composite indicator excludes those who have never heard of HIV/AIDS, while all who had a valid answer to the question regarding whether they had ever heard of HIV/AIDS are included in the denominator. <sup>2</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

Among FSW in Galle who have ever heard of HIV/AIDS, four in five (81.0%) exhibit a discriminatory attitude towards PLHIV, with somewhat more saying that they would not buy fresh vegetables from a shopkeeper or vendor if she knew that this person had HIV (81.4%) than saying that they think children living with HIV should not be able to attend school with children who are HIV negative (62.8%).

**Table 46: GAM 4.1 Discriminatory attitudes towards PLHIV**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Thinks that children living with HIV should be able to attend school with children who are HIV negative	<u>Among all</u>		
	Yes	90/202 (44.6)	37.2 (29.3, 44.7)
	No	112/202 (55.4)	62.8 (55.3, 70.7)
	Don't Know/Not sure/It depends	25/227 (11.0)	-
	<u>Among those aged 18-49</u>		
	Yes	78/169 (46.2)	38.6 (29.5, 47.4)
	No	91/169 (53.8)	61.4 (52.6, 70.5)
	Don't know/Not sure/It depends	19/188 (10.1)	-
	<u>Among those aged 25-49 years</u>		
Yes	72/155 (46.5)	38.6 (29.2, 47.8)	
No	83/155 (53.5)	61.4 (52.2, 70.8)	
Don't know/Not sure/It depends	19/174 (10.9)	-	
Would buy fresh vegetables from a shopkeeper or vendor if she knew that this person had HIV?	<u>Among all</u>		
	Yes	36/201 (17.9)	18.6 (11.3, 26.1)
	No	165/201 (82.1)	81.4 (73.9, 88.7)
	Don't Know/Not sure/It depends	26/227 (11.5)	-
	<u>Among those aged 18-49</u>		
	Yes	32/167 (19.2)	19.6 (11.4, 27.9)
	No	135/167 (80.8)	80.4 (72.1, 88.6)
	Don't know/Not sure/It depends	21/188 (11.2)	-
	<u>Among those aged 25-49 years</u>		
Yes	30/154 (19.5)	20.1 (11.9, 28.3)	
No	124/154 (80.5)	79.9 (71.7, 88.1)	
Don't know/Not sure/It depends	20/174 (11.5)	-	
GAM 4.1 Composite indicator for discriminatory attitudes towards PLHIV (1-2 <sup>1</sup> )	Responded 'No' to either of the two questions		
	<u>Among all</u>	169/215 (78.6)	81.0 (75.9, 86.1)
	<u>Among those aged 18-49</u>	138/180 (76.7)	78.1 (71.1, 85.1)
	<u>Among those aged 25-49</u>	127/166 (76.5)	78.1 (70.8, 85.4)

<sup>1</sup> Participants who responded don't know/not sure/it depends and those who refused to answer were excluded from the analysis. Numerator: Number of respondents who respond no to either of the two questions; Denominator: Number of all respondents who have heard of HIV.

Two in three (68.4%) FSW in Galle know where to receive an HIV test, with a majority (95.8%) mentioning government STI clinic as a place that they know offers an HIV test. Although half (49.7%) of FSW in Galle have ever tested for HIV, fewer (39.5%) have received an HIV test within 12 months before the survey was carried out. Among those who ever did receive an HIV test, three-quarters (96.8%) have received their last HIV test at a government STI clinic.

**Table 47: HIV testing**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Knows where to receive an HIV test	Yes	242/359 (67.4)	68.4 (62.6, 74.2)
	Rather not say	1/360 (0.3)	-
Places that offer HIV testing (multiple response)	Government clinic – STI	229/242 (94.6)	95.8 (93.8, 97.9)
	Government clinic – non-STI	3/242 (1.2)	0.7 (0.0, 1.5)
	Private clinic	23/242 (9.5)	7.4 (4.3, 10.5)
	Private pharmacy or chemist	0/242 (0.0)	-
	Traditional healer/herbalist	0/242 (0.0)	-
	Don't know any	2/242 (0.8)	0.5 (0.0, 1.3)
Knows HIV status from an HIV test	No, I have never been tested	105/352 (29.8)	28.5 (23.3, 33.7)
	Yes, I have been tested	175/352 (49.7)	49.7 (43.9, 55.6)
	Don't know	72/352 (20.5)	21.7 (16.4, 27.0)
	Rather not say	8/360 (2.2)	-
Last HIV test	< 6 months	88/175 (50.3)	61.5 (54.7, 69.8)
	6 – 12 months	41/175 (23.4)	18.7 (12.4, 24.2)
	> 12 Months	45/175 (25.7)	19.5 (13.9, 24.4)
		1/175 (0.6)	0.3 (0.0, 0.8)
Result of last HIV test	Negative	171/175 (97.7)	98.2 (96.7, 99.7)
	Positive	0/175 (0.0)	-
	Indeterminate	0/175 (0.0)	-
	Didn't receive the result	2/175 (1.1)	1.1 (0.0, 2.3)
	Don't know	2/175 (1.1)	0.7 (0.0, 1.6)
GAM 3.4 Composite indicator for knowledge of HIV status <sup>1</sup> (1-3)		127/352 (36.1)	39.5 (33.1, 46.0)
Last HIV test was voluntary	Yes	168/173 (97.1)	98.3 (97.6, 99.1)
	Don't know	1/175 (0.6)	-
	Rather not say	1/175 (0.6)	-
Place where last HIV test was received	Government clinic – STI	166/175 (94.9)	96.8 (95.1, 98.6)
	Government clinic – non-STI	0/175 (0.0)	-
	Private clinic	7/175 (4.0)	2.6 (1.0, 4.2)
	Private pharmacy or chemist	0/175 (0.0)	-
	Traditional healer/herbalist	0/175 (0.0)	-
	Oher (IBBS 2014)	1/175 (0.6)	0.2 (0.0, 0.5)
	Don't know	1/175 (0.6)	0.3 (0.0, 0.9)

<sup>1</sup> Numerator: Number of respondents who tested HIV-positive or who tested in the past 12 months and the result was negative; Denominator: Number of respondents who provided a valid answer to the question about their knowledge about their HIV status from an HIV test.

Among FSW in Galle who have never received an HIV test a majority said that it was because they do not know where to go to receive it (41.8%) or because they did not have time (17.7%). About one in five (22.6%) of FSW in Galle avoid HIV services because of stigma and discrimination, namely fear or concern about stigma by staff and neighbours (11.2%), fear or concern about or experienced violence (12.9%), and fear or concern about or experienced police harassment or arrest (6.5%).

**Table 48. Reasons for never receiving an HIV test**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Reasons for never receiving an HIV test (multiple response) <sup>1</sup>	Don't know where to go	43/105 (41.0)	41.8 (32.3, 51.3)
	I always use condoms	5/105 (4.8)	5.3 (0.8, 9.9)
	Not at risk of getting HIV	11/105 (10.5)	13.2 (6.3, 20.1)
	Didn't have time/Too busy	19/105 (18.1)	17.7 (9.9, 24.9)
	I trust my partner	3/105 (2.9)	2.0 (0.0, 4.2)
	Afraid of knowing I may be HIV-positive	3/105 (2.9)	2.1 (0.0, 4.2)
	Lack of confidentiality	13/105 (12.4)	12.4 (4.6, 20.6)
	Inconvenient testing location	9/105 (8.6)	8.1 (2.8, 13.3)
	No money	3/105 (2.9)	2.8 (0.0, 5.9)
	Other reason	1/105 (1.0)	0.6 (0.0, 1.6)
Don't know	21/105 (20.0)	17.0 (10.0, 23.9)	
Never receiving an HIV test because of stigma and discrimination (multiple response) <sup>1</sup>	Fear or concern about stigma by staff or neighbours	10/94 (10.6)	11.2 (3.6, 18.9)
	Fear of or concern about or experienced violence	9/94 (9.6)	12.9 (3.2, 22.8)
	Fear of or concern about or experienced police harassment or arrest	9/94 (9.6)	6.5 (2.9, 10.3)
	Rather not say	11/105 (10.5)	-
GAM 4.2 Composite indicator for avoidance of HIV services because of stigma & discrimination (1-3) <sup>1</sup>	Did not receive an HIV test because of stigma and discrimination	20/94(21.3)	22.6 (11.3, 34.1)

<sup>1</sup> Due to an error in routing, 72 women did not answer this question.

### Sexual Behaviour

The first time they had vaginal sex, FSW in Galle were on average 19 years of age, although as many as a third (30.0%) of FSW in Galle were aged under 18 years. Their first sexual partner, however, was on average five years older than them (24 years of age).

**Table 49: General sexual history**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age at first vaginal sex	Sample <i>M (SD)</i> = 19.0 (3.55) Mdn = 18.0 N =354 Range = 12 - 40	Pop. est. <i>M (SD)</i> = 19.3 (3.86) Mdn = 18.5 - -		
	< 18		124/354 (35.0)	30.0 (25.4, 34.5)
Never had anal sex <sup>1</sup>			126/313 (40.3)	35.7 (29.3, 42.1)

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age at first anal sex	Sample <i>M (SD)</i> = 20.6 (5.44) Mdn = 19.0 N = 187 Range = 14 – 45	Pop. est. <i>M (SD)</i> = 20.3 (5.11) Mdn = 19.0 - -		
	< 18		38/187 (20.3)	20.2 (14.7, 25.7)
Age of partner at first sex (vaginal or anal)	Sample <i>M (SD)</i> = 24.3 (5.05) Mdn = 23.0 N = 312 Range = 14 – 45	Pop. est. <i>M (SD)</i> = 24.3 (5.42) Mdn = 23.0 - -		

<sup>1</sup> Item non-response (*Don't know* and *Rather not say* combined) was somewhat high, at 13.1%

In the week preceding the survey, FSW in Galle have on average had five sexual partners, with over a third (37.7%) of them having had five or more sexual partners. A majority of FSW in Galle (79.7%) has in the week preceding the survey had only paying sexual partners (clients).

**Table 50: Sexual partners in the past 7 days**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of sexual partners (anal or vaginal intercourse)	Sample <i>M (SD)</i> = 5.8 (4.77) Mdn = 4.0 N = 360 Range = 0 – 20	Pop. est. <i>M (SD)</i> = 4.8 (4.24) Mdn = 3.0 - -		
	0 – 2		97/360 (26.9)	35.8 (29.6, 42.0)
	3 – 4		89/360 (24.7)	26.5 (21.8, 31.2)
	5 or more		174/360 (48.3)	37.7 (32.0, 43.5)
Number of paying partners (clients) (among those who have had at least one sexual partner in the past seven days)	Sample <i>M (SD)</i> = 5.8 (4.45) Mdn = 4.0 N = 348 Range = 0 – 20	Pop. est. <i>M (SD)</i> = 4.8 (3.98) Mdn = 3.0 - -		
	1 – 2		88/360 (25.3)	32.9 (26.7, 39.2)
	3 – 4		91/360 (26.1)	28.8 (23.9, 33.8)
	5 or more		169/360 (48.6)	38.3 (32.2, 44.3)
Had sex only with paying partners (clients)			260/348 (74.4)	79.7 (75.5, 83.9)

In the month preceding the survey, FSW in Galle have on average had seventeen sexual partners, with about one in three of them (33.2%) of them having had sixteen or more sexual partners. More than half of FSW in Galle (58.2%) has in the month preceding the survey had only paying sexual partners (clients). Two in three (68.4%) FSW in Galle have consistently used condoms in the month preceding the survey. On average, FSW in Galle sell sex four days a week, although half of them (48.6%) sell sex four or more days in an average week. Finally, in an average day FSW in Galle sell sex to two paying partners (clients), with about one in ten (11.9%) selling sex to three or more paying partners (clients) in an average day.

**Table 51: Sexual partners in the past 30 days**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of sexual partners (anal or vaginal intercourse)	Sample <i>M (SD)</i> = 20.5 (15.84) Mdn = 15.0 N = 360 Range = 0 – 80	Pop. est. <i>M (SD)</i> = 17.0 (14.07) Mdn = 12.0 - -		
	0		1/360 (0.3)	0.4 (0.0, 1.2)
	1 – 5		25/360 (6.9)	10.9 (6.5, 15.3)
	6 – 10		99/360 (27.5)	34.1 (28.6, 39.6)
	11 – 15		75/360 (20.8)	21.3 (16.6, 26.1)
	16 or more		160/360 (44.4)	33.2 (27.7, 38.7)
Reason for not having any sexual partners or clients in the past 30 days <sup>1</sup>	Could not find any clients		0/1 (0.0)	-
	I am not working as a sex worker anymore		0/1 (0.0)	-
	Other reason		1/1 (100)	-
Number of paying partners (clients)	Sample <i>M (SD)</i> = 19.92 (15.6) Mdn = 15.0 N = 359 Range = 0 – 80	Pop. est. <i>M (SD)</i> = 16.50 (13.82) Mdn = 12.0 - -		
	0		2/359 (0.6)	0.8 (0.0, 1.8)
	1 – 5		25/359 (7.0)	10.6 (6.2, 15.2)
	6 – 10		100/359 (27.9)	34.4 (28.7, 40.0)
	11 – 15		76/359 (21.2)	21.8 (17.1, 26.4)
	16 or more		156/359 (43.5)	32.5 (27.2, 37.6)
Had sex only with paying partners (clients)			195/359 (54.3)	58.2 (52.8, 63.6)
Use of condoms with paying partners (clients)	Every time		229/357 (64.1)	68.4 (63.8, 73.2)
	Almost every time		70/357 (19.6)	14.5 (11.3, 17.7)
	Sometimes		29/357 (8.1)	9.4 (5.6, 13.1)
	Never		28/357 (7.8)	7.3 (4.9, 9.7)
	Don't know		1/357 (0.3)	0.3 (0.0, 1.0)

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Mean number of days per week worked selling	Sample <i>M (SD)</i> = 4.1 (1.98) Mdn = 4.0 N = 356 Range = 0 – 7	Pop. est. <i>M (SD)</i> = 3.7 (1.94) Mdn = 3.0 - -		
	0		12/356 (3.4)	4.3 (1.4, 7.1)
	1 – 2		78/356 (21.9)	28.1 (22.3, 33.8)
	3		64/356 (18.0)	19.1 (14.7, 23.4)
	4 or more		202/356 (56.7)	48.6 (42.8, 54.4)
Mean number of paying partners (clients) per day	Sample <i>M (SD)</i> = 1.7 (2.03) Mdn = 1.0 N = 357 Range = 0 – 30	Pop. est. <i>M (SD)</i> = 1.56 (1.82) Mdn = 1.0 - -		
	0		45/357 (12.6)	14.3 (10.1, 18.3)
	1		147/357 (41.2)	43.4 (37.9, 48.9)
	2		119/357 (33.3)	30.5 (25.5, 35.4)
	3 or more		46/357 (12.9)	11.9 (8.5, 15.3)

When they first received money for sex, FSW in Galle were on average 29 years old, with as many as one in three (30.7%) of them being 35 years of age or older. On average, FSW in Galle have been working as sex workers for eleven years, with about one in three (32.8%) working as a sex worker for five years or less. On average, FSW in Galle receive 1,756 Sri Lankan Rs. (11.3 USD) for sex, although two-thirds (66.1%) of them receive 1,500 Sri Lankan Rs. (10 USD) or less for sex. Finally, about one in four (26.4%) FSW in Galle seeks paying partners (clients) at outdoor places (sites such as streets, parks, bus stations, taxi stations, etc.). Typically, however, one in three (32.3) of FSW in Galle finds paying partners (clients) at hotels, using a mobile phone (give phone number out to people) (20.6%) or in outdoors sites (streets, parks or public transport) (19.5%). A majority (82.9%) of FSW in Galle typically has sex with paying partners (clients) at a hotel or guest house.

**Table 52: Transactional sex**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age when first received money for sex	Sample <i>M (SD)</i> = 28.2 (7.37) Mdn = 26.0 N = 348 Range = 14 – 65	Pop. est. <i>M (SD)</i> = 29.1 (7.73) Mdn = 27.0 - -		
	< 18		6/348 (1.7)	1.6 (0.4, 2.8)
	18 – 24		112/348 (32.2)	28.9 (24.0, 33.8)
	25 – 34		146/348 (42.0)	38.8 (32.8, 44.7)

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
	35 - 44		75/348 (21.6)	27.9 (22.1, 33.8)
	≥ 45		9/348 (2.6)	2.8 (1.1, 4.5)
Length of time working as a FSW	Sample <i>M (SD)</i> = 10.8 (8.32) Mdn = 9.0 N = 345 Range = 0 - 46	Pop. est. <i>M (SD)</i> = 11.0 (8.34) Mdn = 9.0 - -		
	0 - 5		108/345 (31.3)	32.8 (27.1, 38.3)
	6 - 10		95/345 (27.5)	24.3 (19.8, 28.8)
	11 - 15		57/345 (16.5)	15.9 (12.0, 19.8)
	16 - 20		39/345 (11.3)	11.1 (7.8, 14.4)
	21 or more		46/345 (13.3)	15.8 (10.8, 21.2)
Amount of money typically received for sex (in Sri Lankan rupees)	Sample <i>M (SD)</i> = 1,869 (950) Mdn = 1,500 N = 355 Range = 30 - 6,000	Pop. est. <i>M (SD)</i> = 1,756 (922) Mdn = 1,500 - -		
	30 - 1,500		208/355 (58.6)	66.1 (60.5, 71.8)
	1,501 - 3,000		124/355 (34.9)	28.4 (23.4, 33.5)
	3,001 or more		23/355 (6.5)	5.5 (3.2, 7.7)
Amount of money typically received for sex (in USD <sup>1</sup> )	Sample <i>M (SD)</i> = 12.1 (6.15) Mdn = 9.7 N = 355 Range = 0.19 - 38.8	Pop. est. <i>M (SD)</i> = 11.3 (5.96) Mdn = 9.7 - -		
	0.19 - 10		208/355 (58.6)	66.1 (60.5, 71.8)
	11 - 20		124/355 (34.9)	28.4 (23.4, 33.5)
	21 or more		23/355 (6.5)	5.5 (3.2, 7.7)
Seeks paying partners (clients) at outdoor places (sites such as streets, parks, bus stations, taxi stations, etc.)	Yes		98/358 (27.4)	26.4 (21.4, 31.4)
	Don't know		1/360 (0.3)	-
	Rather not say		1/360 (0.3)	-
Typically finds paying partners (clients)	Brothel		18/360 (5.0)	3.3 (1.7, 4.9)
	Bar, café, disco, or restaurant		4/360 (1.1)	1.1 (0.1, 2.0)
	Hotel		108/360 (30.0)	32.3 (25.8, 39.0)
	Street, park or public transport		73/360 (20.3)	19.5 (14.8, 24.1)
	Through friends		20/360 (5.6)	6.3 (3.6, 8.9)
	Internet (e.g. Facebook), chat, or SMS		1/360 (0.3)	0.2 (0.0, 0.4)
	Motel or Guest House		1/360 (0.3)	0.3 (0.0, 0.7)
	School		0/360 (0.0)	-
	Party		0/360 (0.0)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Service station	4/360 (1.1)	0.9 (0.1, 1.6)
	Through an intermediary (pimp, bartender, taxi driver)	22/360 (6.1)	6.1 (3.1, 9.1)
	Truck stop	7/360 (1.9)	1.6 (0.7, 2.6)
	Spa / Salon / Massage Parlour	36/360 (10.0)	7.9 (5.3, 10.4)
	Using a mobile phone (give phone number out to people)	66/360 (18.3)	20.6 (15.3, 25.9)
Typically has sex with paying partners (clients) (multiple response)	At a brothel	31/360 (8.6)	8.2 (4.8, 11.5)
	At a hotel or guest house	285/360 (79.2)	82.9 (78.9, 86.8)
	At a massage parlor	39/360 (10.8)	8.5 (5.9, 11.2)
	At her own home	10/360 (2.8)	3.0 (1.4, 4.7)
	At the paying partner's (client's) home	25/360 (6.9)	5.5 (3.2, 7.9)
	In a car	15/360 (4.2)	2.8 (1.6, 4.0)
	In a park	8/360 (2.2)	1.9 (0.8, 3.1)

<sup>1</sup> Central Bank of Sri Lanka currency exchange rate on 28 February 2018 (1 USD = 154.74 Sri Lankan Rs.), available at [http://www.cbsl.gov.lk/htm/english/\\_cei/er/e\\_1.asp](http://www.cbsl.gov.lk/htm/english/_cei/er/e_1.asp)

At last sex with a paying partner (client) a majority (86.6%) of FSW in Galle have used a condom. Among those who have not used a condom, the main reasons were never having heard of a condom (44.5%) and because they do not think it is necessary (27.1%).

**Table 53: Last Paying Partner (Client)**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
GAM 3.6 Used a condom at last sex with a client		307/360 (85.3)	86.6 (83.4, 89.9)
Reasons for not using a condom (multiple response) <sup>1</sup>	Never heard of condoms	24/53 (45.3)	44.5 (30.8, 58.1)
	Don't know how to obtain a condom	1/53 (1.9)	1.4 (0.0, 3.4)
	I didn't think it was necessary	12/53 (22.6)	27.1 (14.9, 39.5)
	I didn't think of it	4/53 (7.5)	9.2 (0.0, 18.4)
	Not available	1/53 (1.9)	2.5 (0.0, 6.7)
	Too expensive	0/53 (0.0)	-
	Partner objected	9/53 (17.0)	13.8 (5.0, 22.4)
	Don't like them	4/53 (7.5)	7.6 (0.6, 14.4)
	Used another contraceptive	1/53 (1.9)	1.1 (0.0, 2.6)
	Used other prevention methods	0/53 (0.0)	-
	Partner was a faithful client	3/53 (5.7)	5.2 (0.2, 10.3)
	Partner was a regular client	3/53 (5.7)	5.0 (0.1, 9.9)
	Condoms take away pleasure	1/53 (1.9)	1.1 (0.0, 3.1)
Nationality of the last paying partner (client)	Sri Lankan	351/360 (97.5)	98.1 (97.3, 99.0)
	Other <sup>1</sup>	9/360 (2.5)	1.9 (1.0, 2.7)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
HIV status of the past paying partner (client)	HIV-negative	138/360 (38.3)	39.8 (33.7, 45.9)
	HIV-positive	0/360 (0.0)	-
	I did not know/ask	222/360 (61.7)	60.2 (54.1, 66.3)

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses. <sup>2</sup> European 5/9

Only about half (42.4 %) of FSW in Galle have ever had a regular, non-paying sexual partner. Among those who have, in the month preceding the survey, FSW in Galle have on average had one regular, non-paying sexual partner. When looking at only those FSW in Galle who have had a regular, non-paying sexual partner in the month preceding the survey, only 11.5% have consistently used condoms with their partner. Many more (36.5%) have, however, used a condom at last sex with a regular, non-paying sexual partner. Among those who have had a regular, non-paying sexual partner in the month preceding the survey and who have not used a condom at last sex, most FSW in Galle did so because their partner was faithful (49.9%), because their partner objected (32.9%). Many have also not used a condom because they don't like condoms (18.8%).

**Table 54: Sexual activity with regular (non-paying) partners in the past 30 days**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Never had a regular (non-paying) partner		191/360 (53.1)	57.6 (52.1, 63.1)
Number of regular (non-paying) partners	Sample <i>M (SD)</i> = 1.2 (0.67) Mdn = 1.0 N = 169 Range = 0 - 4	Pop. est. <i>M (SD)</i> = 1.2 (0.68) Mdn = 1.0 -	-
	0	14/169 (8.3)	7.9 (1.6, 14.2)
	1	116/169 (68.6)	67.3 (56.8, 77.6)
	2	31/169 (18.3)	19.4 (12.1, 27.0)
	3 or more	8/169 (4.7)	5.4 (2.1, 8.7)
Use of condoms with regular (non-paying) partner	Every time	17/155 (11.0)	11.5 (6.0, 16.8)
	Almost every time	42/155 (27.1)	25.0 (17.9, 32.2)
	Sometimes	43/155 (27.7)	32.7 (24.4, 40.9)
	Never	53/155 (34.2)	30.8 (23.6, 38.1)
Used a condom at last sex with a regular (non-paying) partner	Yes	62/155 (40.0)	36.5 (29.0, 44.1)
Reasons for not using a condom (multiple response)	Never heard of condoms	4/93 (4.3)	4.5 (0.3, 8.7)
	Don't know how to obtain a condom	0/93 (0.0)	-
	I didn't think it was necessary	10/93 (10.8)	12.1 (5.2, 18.8)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	I didn't think of it	4/93 (4.3)	3.6 (0.0, 7.3)
	Not available	1/93 (1.1)	1.1 (0.0, 2.9)
	Too expensive	0/93 (0.0)	-
	Partner objected	33/93 (35.5)	32.9 (22.0, 43.8)
	Don't like them	19/93 (20.4)	18.8 (10.3, 27.3)
	Used another contraceptive	14/93 (15.1)	17.3 (7.6, 27.2)
	Used other prevention methods	1/93 (1.1)	1.1 (0.0, 2.9)
	Partner was faithful	41/93 (44.1)	49.9 (39.3, 60.6)
	Condoms take away pleasure	6/93 (6.5)	7.2 (0.5, 13.8)

Only 5.6% of FSW in Galle have never heard of condoms. Among those who have, most (92.4%) also know where to obtain condoms. Specifically, FSW in Galle most often obtain condoms from pharmacies/chemists (48.1%) and from government STD clinics (42.4). Three in four (76.1%) of FSW in Galle condoms are affordable or somewhat affordable. About the same proportion of FSW in Galle have ever heard of female condom and lubricant (15.5% and 22.2%, respectively). Among those who have ever heard of female condom, very few have also ever used it (5.5%). Similarly, among FSW in Galle who have ever heard of lubricant, two-thirds (64.6%) never use it.

### Use of Condoms and Lubricants

**Table 55: Use of condoms and lubricants**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of condoms	Yes	337/359 (93.9)	94.4 (92.0, 96.8)
	Don't know	1/360 (0.3)	-
Knows where to obtain condoms		315/337 (93.5)	92.4 (88.9, 95.9)
Usually obtains condoms from: (multiple response)	Government clinic - STD clinic	111/315 (35.2)	42.4 (36.3, 48.5)
	Govt. clinic - Not STD clinic	7/315 (2.2)	4.1 (0.8, 7.5)
	Private clinic	6/315 (1.9)	4.1 (0.2, 8.0)
	Private pharmacy or chemist	179/315 (56.8)	48.1 (42.5, 53.7)
	Traditional healer/herbalist	2/315 (0.6)	0.7 (0.1, 1.3)
	Neighbourhood market/stand	47/315 (14.9)	14.4 (10.6, 18.2)
	Friends	23/315 (7.3)	8.1 (4.6, 11.5)
	Sex partner/s	7/315 (2.2)	2.0 (0.7, 3.3)
	Bar / Nightclub	1/315 (0.3)	0.3 (0.0, 0.7)
	NGOs/ outreach service	52/315 (16.5)	16.0 (11.7, 20.3)
	Service station(s)	32/315 (10.2)	9.5 (5.9, 13.0)
	I do not use condoms	2/315 (0.6)	0.7 (0.0, 1.6)
Affordability of male condoms	Affordable	190/335 (56.7)	61.9 (56.2, 67.6)
	Somewhat affordable	65/335 (19.4)	14.2 (10.8, 17.5)
	Not affordable	35/335 (10.4)	9.7 (6.2, 13.3)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Don't know	45/335 (13.4)	14.2 (10.1, 18.3)
	Rather not say	2/337 (0.6)	-
Ever heard of a female condom	Yes	63/354 (17.8)	15.5 (11.8, 19.1)
	Don't know	6/360 (1.7)	-
Ever used a female condom		4/63 (6.3)	5.5 <sup>2</sup>
Ever heard of lubricants	Yes	90/333 (27.0)	22.2 (17.8, 26.4)
	Don't know	27/360 (7.5)	-
Frequency of lubricant use during vaginal or anal sex	Always	4/90 (4.4)	5.9 (0.9, 11.3)
	Usually	6/90 (6.7)	6.7 (2.5, 10.9)
	Sometimes	17/90 (18.9)	19.1 (12.3, 26.0)
	Rarely	4/90 (4.4)	3.6 <sup>2</sup>
	Never	59/90 (65.6)	64.6 (56.3, 72.7)
Type of lubricant used (multiple response) <sup>1</sup>	Glycerine	8/31 (25.8)	(32.2 (13.9, 50.3))
	Saliva or water	3/31 (9.7)	(9.5 (0.0, 19.1))
	Vaseline	5/31 (16.1)	(12.1 (3.3, 21.0))
	Baby oil	3/31 (9.7)	(8.8 (0.0, 17.3))
	Lotion	9/31 (29.0)	(22.0 (9.5, 33.9))
	Other oil	1/31 (3.2)	(1.6 (0.0, 3.9))
	Water-based	4/31 (12.9)	(9.2 (1.2, 17.5))
	Silicone-based	2/31 (6.5)	(3.9 (0.0, 8.5))
	Soap	0/31 (0.0)	-
	Whatever we get from peer educator(s), don't know what it is	2/31 (6.5)	(12.8 (0.0, 29.0))
Don't know	2/31 (6.5)	(7.6 (0.0, 16.8))	

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses. <sup>2</sup> 95% CI cannot be calculated

About three in four (73.2%) FSW in Galle have ever heard of diseases that can be transmitted sexually. With regard to recognizing and describing symptoms of an STI, most of them know that itching in women (71.5%) and in men (66.9%) indicates a possible sexually transmitted infection. Very few (5.0%) have received an STI diagnosis in the year preceding the survey.

## Sexually Transmitted Infections

Table 56: Sexually transmitted infections

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of diseases that can be transmitted sexually	Yes	247/360 (70.8)	73.2 (68.6, 77.8)
	Don't know	11/360 (3.1)	-
Can describe symptoms of sexually transmitted infections in women (multiple response)	1. Abdominal pain	13/247 (5.3)	6.5 (1.6, 11.5)
	2. Abnormal genital discharge	65/247 (26.3)	25.1 (18.8, 31.4)
	3. Burning pain on urination	63/247 (25.5)	22.2 (16.5, 27.9)
	4. Genital ulcers or sores	64/247 (25.9)	21.6 (16.5, 26.7)
	5. Swelling in groin area	49/247 (19.8)	16.1 (11.4, 20.8)
	6. Itching	170/247 (68.8)	71.5 (65.5, 77.3)
	0. Don't know any	21/247 (8.5)	7.3 (4.2, 10.4)
Symptoms mentioned (0-6)	1. Abdominal pain	21/247 (8.5)	7.3 (4.2, 10.4)
	2. Abnormal genital discharge	94/247 (38.1)	43.4 (36.1, 50.6)
	3. Burning pain on urination	78/247 (31.6)	31.8 (24.9, 38.7)
	4. Genital ulcers or sores	44/247 (17.8)	14.6 (9.9, 19.4)
	5. Swelling in groin area	8/247 (3.2)	2.2 (0.8, 3.7)
	6. Itching	2/247 (0.8)	0.6 (0.0, 1.3)
	0. Don't know any	0/247 (0.0)	-
Can describe symptoms of sexually transmitted infections in women (multiple response)	1. Genital discharge	27/247 (10.9)	13.1 (7.3, 18.9)
	2. Burning pain on urination	21/247 (8.5)	5.8 (3.4, 8.2)
	3. Genital ulcers or sores	63/247 (25.5)	21.1 (16.3, 26.0)
	4. Swelling in groin area	36/247 (14.6)	11.6 (7.7, 15.4)
	5. Itching	163/247 (66.0)	66.9 (60.4, 73.5)
	0. Don't know any	45/247 (18.2)	17.7 (12.4, 23.0)
Symptoms mentioned (0-6)	1. Genital discharge	45/247 (18.2)	17.7 (12.4, 23.0)
	2. Burning pain on urination	126/247 (51.0)	56.3 (49.0, 63.6)
	3. Genital ulcers or sores	52/247 (21.1)	18.4 (13.1, 23.7)
	4. Swelling in groin area	16/247 (6.5)	5.2 (2.5, 7.9)
	5. Itching	8/247 (3.2)	2.4 (0.7, 4.2)
	Don't know any	0/247 (0.0)	-
Tested for sexually transmitted diseases in the past 3 months	Yes	82/359 (22.8)	25.3 (18.5, 32.0)
	Rather not say	1/360 (0.3)	-
Received an STI diagnosis in the past 12 months	Yes	8/244 (3.3)	5.0 (0.6, 9.5)
	Don't know	2/247 (0.8)	-
	Rather not say	1/247 (0.4)	-
Had a discharge or genital ulcer (sore) in the last 12 months	Yes	2/359 (0.6)	0.5 (0.0, 1.1)
	Rather not say	1/360 (0.3)	-
Sought treatment <sup>1</sup>		2/2 (100)	-
Places where treatment was sought (multiple response) <sup>1</sup>	Government clinic - STD clinic	1/2 (50.0)	-
	Govt. clinic - Not STD clinic	0/2 (0.0)	-
	Private clinic	0/2 (0.0)	-
	Private pharmacy or chemist	1/2 (50.0)	-
	Traditional healer/herbalist	0/2 (0.0)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	I used medicine or herbs from home	0/2 (0.0)	-
Reasons for seeking treatment from that source (multiple response) <sup>1</sup>	Confidentiality	1/2 (50.0)	-
	Affordability	0/2 (0.0)	-
	Recommended by friend or acquaintance	0/2 (0.0)	-
	Quality and/or specialized care given at this place	0/2 (0.0)	-
	Knows the caregivers	0/2 (0.0)	-
	Known friendliness of the caregivers	0/2 (0.0)	-
	Proximity/location	0/2 (0.0)	-
	Don't know	1/2 (50.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

Among FSW in Galle how had ever tested for HIV, almost all (89.2%) have told their counsellor/health care provider that they exchange sex for money at their last HIV testing. In addition, almost all (92.6%) of them were satisfied or very satisfied with the quality of services provided at the place where they received their last HIV test.

### Use of Prevention Programs

**Table 57: Contact with healthcare providers**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
<b>STI treatment</b>			
Told the healthcare provider that they exchange sex for money when the last treatment for any symptom of an STI or a diagnosis for an STI was received <sup>1</sup>		1/2 (50.0)	-
Satisfaction with how the healthcare provider treated them during this last visit <sup>1</sup>	Very satisfied	1/2 (50.0)	-
	Somewhat satisfied	0/2 (0.0)	-
	Not satisfied	1/2 (50.0)	-
<b>HIV testing</b>			
Told the counsellor/health care provider that they exchange sex for money when last HIV test was received	Yes Don't know	145/174 (83.3) 1/175 (0.6)	89.2 (85.4, 93.8) -
Satisfaction with the quality of services provided at the place where the last HIV test was received	Very satisfied	86/175 (49.1)	52.2 (43.4, 61.5)
	Satisfied	74/175 (42.3)	40.4 (31.6, 49.0)
	A little satisfied	13/175 (7.4)	6.7 (0.0, 13.3)
	Not satisfied	1/175 (0.6)	0.4 (0.0, 1.2)
	Don't know	1/175 (0.6)	0.3 (0.0, 0.8)

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

In the year preceding the survey, 15.9% of FSW in Galle had sought medical care, with very few (4.3%) of them experiencing any difficulty getting medical care when they sought it. Finally, three in four (74.3%) FSW in Galle have ever been pregnant, although fewer than half of them (40.4%) visited an ANC for prenatal care during most recent pregnancy.

**Table 58: Use of healthcare services and pregnancy**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sought medical care for any reason in the past 12 months	Yes	56/359 (15.6)	15.9 (10.8, 21.0)
	Don't know	1/360 (0.3)	-
Had difficulty getting medical care when they sought it		3/56 (5.4)	4.3 (2.9, 5.5)
Type of difficulty (multiple response) <sup>1</sup>	Too expensive	0/2 (0.0)	-
	Too far away	0/2 (0.0)	-
	Could not take time from work	0/2 (0.0)	-
	Long waiting times	1/2 (50.0)	-
	Don't know	1/2 (50.0)	-
	Rather not say	1/3 (33.3)	-
Ever been pregnant		279/360 (77.5)	74.3 (68.7, 79.9)
Visited an ANC for prenatal care during most recent pregnancy	Yes	113/254 (44.5)	40.4 (33.2, 47.2)
	Don't know	24/279 (8.6)	-
	Rather not say	1/279 (0.4)	-
Offered an HIV test at the ANC or maternity during most recent pregnancy	Yes	46/86 (53.5)	46.5 (33.4, 57.9)
	Don't know	27/113 (23.9)	-
HIV status during most recent pregnancy	Negative	119/278 (42.8)	41.9 (35.9, 48.0)
	Positive	0/278 (0.0)	-
	Don't know	159/278 (57.2)	58.1 (52.0, 64.1)

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

One in four (28.5%) FSW in Galle have been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the three months preceding the survey. Among those who have, most have received general HIV/STI prevention/transmission information (58.3%) or condoms and lubricants (62.0%), or counselling on condom use and safe sex (54.6%). In addition, one in four (25.3%) FSW in Galle has tested for an STI in the three months preceding the survey. Coverage by HIV prevention programs, defined as receipt of at least two interventions (i.e., Given condoms and lubricant; Counselling on condom use and safe sex; Received an STI test) in the past three months, is somewhat low, at 15.4%.

**Table 59: Coverage of HIV prevention programs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the past 3 months	Yes	104/358 (29.1)	28.5 (23.0, 33.9)
	Don't know	2/360 (0.6)	-
Services received (multiple response)	General HIV/STI prevention/transmission information	61/104 (58.7)	58.3 (46.3, 70.2)
	Condoms and lubricants	51/104 (49.0)	62.0 (51.4, 72.5)
	Referral for STI treatment	48/104 (46.2)	40.7 (29.4, 52.1)
	Referral for VCT	2/104 (1.9)	1.6 (0.0, 3.4)
	Counselling on condom use and safe sex	58/104 (55.8)	54.6 (42.7, 66.2)
Tested for sexually transmitted diseases in the past 3 months	Yes	82/359 (22.8)	25.3 (18.5, 32.0)
	Rather not say	1/360 (0.3)	-
GAM 3.7 Coverage of HIV prevention programs <sup>1</sup>		41/360 (11.4)	15.4 (9.8, 20.7)

<sup>1</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Received an STI test)

### Experiences of Discrimination and Violence on the basis of being a FSW

Few FSW in Galle have been refused health care (2.8%) or police assistance (4.9%) on the basis of being a FSW. Verbal and sexual violence against them, however, is high, with 10.7% having experienced verbal insults. Some FSW in Galle have also been physically assaulted (0.8%) or sexually assaulted or raped (1.2%).

**Table 60: Experiences of Discrimination and Violence on the basis of being a FSW**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Refused health care	Yes	12/358 (3.4)	2.8 (1.2, 4.4)
	No	346/358 (96.6)	97.2 (95.6, 98.8)
	Don't know	2/360 (0.6)	-
Refused police assistance	Yes	12/357 (3.4)	4.9 (1.7, 8.0)
	No	345/357 (96.6)	95.1 (92.0, 98.3)
	Don't know	3/360 (0.8)	-
Verbally insulted	Yes	35/351 (10.0)	10.7 (6.4, 15.0)
	No	316/351 (90.0)	89.3 (85.0, 93.6)
	Don't know	9/360 (2.5)	-
Hit, kicked, or beaten	Yes	3/357 (0.8)	0.8 (0.0, 1.8)
	No	354/357 (99.2)	99.2 (98.2, 100)
	Don't know	3/360 (0.8)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sexually assaulted or raped	Yes	4/354 (1.1)	1.2 (0.1, 2.3)
	No	350/354 (98.9)	98.8 (97.7, 99.9)
	Don't know	6/360 (1.7)	-
Sexual assailant/rapist <sup>1</sup>	Stranger	1/4 (25.0)	-
	Social acquaintance	1/4 (25.0)	-
	Family/relative	0/4 (0.0)	-
	Police	0/4 (0.0)	-
	Paying sexual partner (Client)	2/4 (50.0)	-
	Other sex worker	0/4 (0.0)	-
	Pimp	0/4 (0.0)	-
	Non-paying partner or boyfriend/girlfriend	0/4 (0.0)	-
Sought medical treatment for sexual assault/rape <sup>1</sup>		2/4 (50.0)	-
Reported sexual assault/rape to the police <sup>1</sup>		3/4 (75.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Alcohol and Drugs

About one in five (21.4%) FSW in Galle has ever had a drink containing alcohol, and among those who have, most have a drink containing alcohol about once a week (37.1%) or less often.

**Table 61: Alcohol consumption**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had a drink containing alcohol	Yes	88/356 (24.7)	21.4 (17.1, 25.7)
	Rather not say	4/360 (1.1)	-
Alcohol consumption in the past month	I never drink alcohol	1/88 (1.1)	1.6 (1.3, 2.0)
	Never in the last 4 weeks	14/88 (15.9)	24.2 (12.2, 38.1)
	Every day	1/88 (1.1)	1.0 (0.7, 1.2)
	At least once a week	37/88 (42.0)	37.1 (24.6, 48.3)
	Less than once a week	35/88 (39.8)	36.2 (24.5, 47.1)

Hardly any FSW in Galle had ever used non-prescribed/illicit drugs, and none had ever injected drugs for non-medical purposes.

**Table 62: Use of non-prescribed/illicit drugs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of drug used			
Heroin	<i>Frequency of consumption</i>		
	Have never used	273/314 (86.9)	84.2 (78.1, 90.1)
	Never in the past 12 months	2/314 (0.6)	2.2 (0.0, 5.3)
	Monthly or less	1/314 (0.3)	0.1 (0.0, 0.2)
	Several times a month	0/314 (0.0)	-
	Two to four times a month	0/314 (0.0)	-
	Two to three times a week	1/314 (0.3)	0.2 (0.1, 0.4)
	Four or more times a week	6/314 (1.9)	1.1 (0.3, 1.7)
	Don't Know <sup>1</sup>	31/314 (9.9)	12.3 (7.5, 17.1)
Rather not say	46/360 (12.8)	-	
Cannabis	<i>Frequency of consumption</i>		
	Have never used	265/315 (84.1)	81.6 (76.0, 87.2)
	Never in the past 12 months	1/315 (0.3)	0.2 (0.0, 0.3)
	Monthly or less	0/315 (0.0)	-
	Several times a month	0/315 (0.0)	-
	Two to four times a month	0/315 (0.0)	-
	Two to three times a week	2/315 (0.6)	0.4 (0.0, 0.7)
	Four or more times a week	2/315 (0.6)	0.5 (0.1, 1.0)
	Don't Know <sup>1</sup>	45/315 (14.3)	17.3 (11.7, 23.1)
Rather not say	45/360 (12.5)	-	
Cocaine	<i>Frequency of consumption</i>		
	Have never used	253/312 (81.1)	78.7 (73.2, 84.1)
	Never in the past 12 months	1/312 (0.3)	0.2 (0.0, 0.4)
	Monthly or less	0/312 (0.0)	-
	Several times a month	0/312 (0.0)	-
	Two to four times a month	0/312 (0.0)	-
	Two to three times a week	0/312 (0.0)	-
	Four or more times a week	0/312 (0.0)	-
	Don't Know <sup>1</sup>	58/312 (18.6)	21.2 (15.7, 26.6)
Rather not say	48/360 (13.3)	-	
Ecstasy	<i>Frequency of consumption</i>		
	Have never used	235/310 (75.8)	72.9 (66.9, 78.8)
	Never in the past 12 months	1/310 (0.3)	0.2 (0.0, 0.4)
	Monthly or less	0/310 (0.0)	-
	Several times a month	0/310 (0.0)	-
	Two to four times a month	0/310 (0.0)	-
	Two to three times a week	0/310 (0.0)	-
	Four or more times a week	0/310 (0.0)	-
	Don't Know <sup>1</sup>	74/310 (23.9)	26.9 (21.0, 33.0)
Rather not say	50/360 (13.9)	-	
Amphetamines	<i>Frequency of consumption</i>		
	Have never used	234/309 (75.7)	73.6 (67.8, 79.2)
	Never in the past 12 months	1/309 (0.3)	0.2 (0.0, 0.4)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Monthly or less	0/309 (0.0)	-
	Several times a month	0/309 (0.0)	-
	Two to four times a month	0/309 (0.0)	-
	Two to three times a week	0/309 (0.0)	-
	Four or more times a week	0/309 (0.0)	-
	Don't Know <sup>1</sup>	74/309 (23.9)	26.3 (20.6, 32.0)
	Rather not say	51/360 (14.2)	-
Opium	<i>Frequency of consumption</i>		
	Have never used	251/311 (80.7)	77.5 (71.3, 83.6)
	Never in the past 12 months	1/311 (0.3)	0.2 (0.0, 0.4)
	Monthly or less	0/311 (0.0)	-
	Several times a month	0/311 (0.0)	-
	Two to four times a month	0/311 (0.0)	-
	Two to three times a week	0/311 (0.0)	-
	Four or more times a week	0/311 (0.0)	-
	Don't Know <sup>1</sup>	59/311 (19.0)	22.3 (16.3, 28.5)
Rather not say	49/360 (13.6)	-	
Hashish	<i>Frequency of consumption</i>		
	Have never used	238/311 (76.5)	73.5 (66.4, 80.5)
	Never in the past 12 months	1/311 (0.3)	0.2 (0.0, 0.4)
	Monthly or less	0/311 (0.0)	-
	Several times a month	0/311 (0.0)	-
	Two to four times a month	0/311 (0.0)	-
	Two to three times a week	0/311 (0.0)	-
	Four or more times a week	0/311 (0.0)	-
	Don't Know <sup>1</sup>	72/311 (23.2)	26.4 (19.3, 33.5)
Rather not say	49/360 (13.6)	-	
Other drugs	<i>Frequency of consumption</i>		
	Have never used	282/349 (80.8)	77.0 (71.1, 82.9)
	Never in the past 12 months	1/349 (0.3)	1.3 (0.0, 4.0)
	Monthly or less	1/349 (0.3)	0.3 (0.0, 0.7)
	Several times a month	4/349 (1.1)	1.2 (0.1, 2.4)
	Two to four times a month	4/349 (1.1)	1.1 (0.1, 2.2)
	Two to three times a week	8/349 (2.3)	1.8 (0.7, 2.8)
	Four or more times a week	4/349 (1.1)	0.9 (0.2, 1.7)
	Don't Know <sup>1</sup>	45/349 (12.9)	16.4 (11.0, 18)
Rather not say	11/360 (3.1)	-	

<sup>1</sup> For each of the type of drug there is a significant proportion of the response 'Don't know.' Although it is possible that it refers to not knowing the frequency of drug use, it is more likely that it indicates never have heard of the particular type of drug.

**Table 63: Use of non-prescribed/illicit drugs by injection**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever injected drugs for non-medical purposes	Yes	0/321 (0.0)	-
	No	321/321 (100)	-
	Don't know <sup>1</sup>	39/360 (10.8)	-

<sup>1</sup> There is a chance that some participants did not understand this question.

### Use of Media

Regarding media use, FSW in Galle most frequently watch TV (most days or every day: 88.0%) or listen to the radio (most days or every day: 60.1%). Very few read the newspaper (never: 57.0%) or use the Internet (never: 72.2%). Finally, nine in ten (90.8%) of FSW in Galle have a mobile phone.

**Table 64: Use of media in the past 30 days**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Radio	Never	101/356 (28.4)	29.3 (24.2, 34.4)
	Once a month	7/356 (2.0)	2.0 (0.6, 3.5)
	Once a week	22/356 (6.2)	6.8 (3.9, 9.6)
	Most days	166/356 (46.6)	44.7 (39.0, 50.5)
	Every day	55/356 (15.4)	16.3 (11.8, 20.7)
	Don't know	5/356 (1.4)	1.0 (0.4, 1.6)
	Rather not say	4/360 (1.1)	-
TV	Never	31/355 (8.7)	7.7 (4.9, 10.5)
	Once a month	2/355 (0.6)	0.6 (0.0, 1.4)
	Once a week	10/355 (2.8)	2.4 (0.8, 3.9)
	Most days	176/355 (49.6)	50.5 (44.4, 56.7)
	Every day	130/355 (36.6)	37.5 (32.1, 43.0)
	Don't know	6/355 (1.7)	1.3 (0.5, 2.0)
	Rather not say	5/360 (1.4)	-
Newspaper	Never	197/350 (56.3)	57.0 (51.6, 62.5)
	Once a month	12/350 (3.4)	4.6 (1.6, 7.6)
	Once a week	50/350 (14.3)	16.8 (12.0, 21.7)
	Most days	85/350 (24.3)	20.3 (16.2, 24.4)
	Every day	3/350 (0.9)	0.6 (0.1, 1.1)
	Don't know	3/350 (0.9)	0.7 (0.1, 1.2)
	Rather not say	10/360 (2.8)	-
Internet	Never	249/354 (70.3)	72.2 (67.1, 77.4)
	Once a month	1/354 (0.3)	0.2 (0.0, 0.4)
	Once a week	0/354 (0.0)	-
	Most days	64/354 (18.1)	16.1 (11.7, 20.5)
	Every day	40/354 (11.3)	11.5 (7.8, 15.1)
	Rather not say	6/360 (1.7)	-
Has a mobile phone		323/360 (10.3)	90.8 (87.4, 94.2)

In June or July 2017, 40.5% of FSW in Galle have received any services (educational leaflets, condoms, HIV counselling) from the NGO Manawa. The same proportion (40.0%) have received condoms from the same NGO and 35.6% were escorted by NGO Manawa's staff to an STI clinic. One in five (18.2%) FSW in Galle received a purse by peer educators during their outreach work in October/November 2017.

## Multiplier questions

**Table 65: Multiplier questions**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Received any services (educational leaflets, condoms, HIV counselling) from the NGO Manawa in Galle in May, June or July 2017	Yes	141/355 (39.7)	40.5 (34.3, 46.8)
	No	214/355 (60.3)	59.5 (53.3, 65.7)
	Don't know	5/360 (1.4)	-
Received condoms from the condoms from the NGO Manawa in Galle in May, June or July 2017	Yes	136/346 (39.3)	40.0 (33.9, 46.4)
	No	210/346 (60.7)	60.0 (53.6, 66.1)
	Don't know	14/360 (3.9)	-
Escorted to an STI clinic by the staff of the NGO Manawa in Galle in May, June or July 2017	Yes	125/358 (34.9)	35.6 (29.3, 41.9)
	No	233/358 (65.1)	64.4 (58.1, 70.7)
	Don't know	2/360 (0.6)	-
Received a purse by peer educators (staff of the NGO Manawa in Galle) in the week of 30 October-5 November 2017 during their outreach work	Yes	64/358 (17.9)	18.5 (12.5, 24.5)
	No	294/358 (82.1)	81.5 (75.5, 87.5)
	Don't know	2/360 (0.6)	-
Participated in the first IBBS in Sri Lanka in 2014	Yes	58/354 (16.4)	18.2 (12.8, 23.5)
	Don't know	6/360 (1.7)	-
	In Colombo	1/58 (1.7)	1.1 (0.7, 1.5)
	In Kandy	0/58 (0.0)	-
	In Galle	57/58 (98.3)	98.9 (98.5, 99.3)

### 3.1.3. Kandy

A total of 362 FSW respondents were recruited in Kandy, including 8 seeds. For estimates, Gile's SS with population size estimate of 2,204 (low estimate = 709; high estimate = 3,699) was used along with 0.95 confidence intervals, and 5,000 bootstraps. Across the tables presented below, because estimates based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Homophily and Convergence

As previously mentioned, a homophily value of one means no homophily, while values above one show the presence of positive homophily (e.g. people are recruiting similar to themselves), and values below 1 mean negative homophily (e.g. people are recruiting different from themselves). In the FSW Kandy sample, the homophily ranged from 0.79 to 1.12, overall this can be interpreted as weak homophily. Convergence was reached on all key indicators. For five of the key indicators, population estimates became stable around the 300th participant. For the indicator of avoidance of HIV services, that is measured only among those participants who did not receive an HIV test, convergence was reached around the 50th participant. Finally, for the indicator of holding discriminatory attitudes towards PLHIV, that is measured only among those participants who had ever heard of HIV, convergence was reached around the 75th participant.

**Table 66: Homophily analysis**

	<i>Target indicator</i>	<i>Recruitment homophily</i>	<i>Estimated population homophily</i>
1	3.3 HIV prevalence among FSW (% HIV positive) <sup>1</sup>	-	-
2	3.11 Active syphilis among FSW <sup>2</sup>	-	-
3	3.14 Viral hepatitis among FSW (HBV) <sup>1</sup>	-	-
4	3.14 HIV and hepatitis co-infection among FSW <sup>1</sup>	-	-
5	3.4 <sup>3</sup> Knowledge of HIV status among FSW (% Know HIV status from an HIV test)	1.06	1.24
6	3.7 <sup>4</sup> Coverage of HIV prevention programs among FSW (% Reached with HIV/AIDS prevention programs)	1.04*	1.41
7	3.6 Condom use among FSW (% Used a condom the last time they had sex with a client)	1.12*	1.14
8	4.1 <sup>5</sup> Discriminatory attitudes towards PLHIV (% who answer 'No' to at least one of the two questions)	1.00	1.15
9	4.2 Avoidance of HIV services because of stigma and discrimination among FSW <sup>6</sup> (% who answer 'Yes' to at least one of the reasons)	0.99	0.79
10	Age (% Mdn+)	1.06	0.99
11	Income (% 20,000 Rs.+)	1.09	1.12

<sup>1</sup> Not calculated because there were no positive cases. <sup>2</sup> Not calculated because there were two positive cases.

<sup>3</sup> Tested and positive or tested in the past 12 months and negative. <sup>4</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Tested for STI). <sup>5</sup>

Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?; Do you think that children living with HIV should be able to attend school with children who are HIV negative? <sup>6</sup> Did

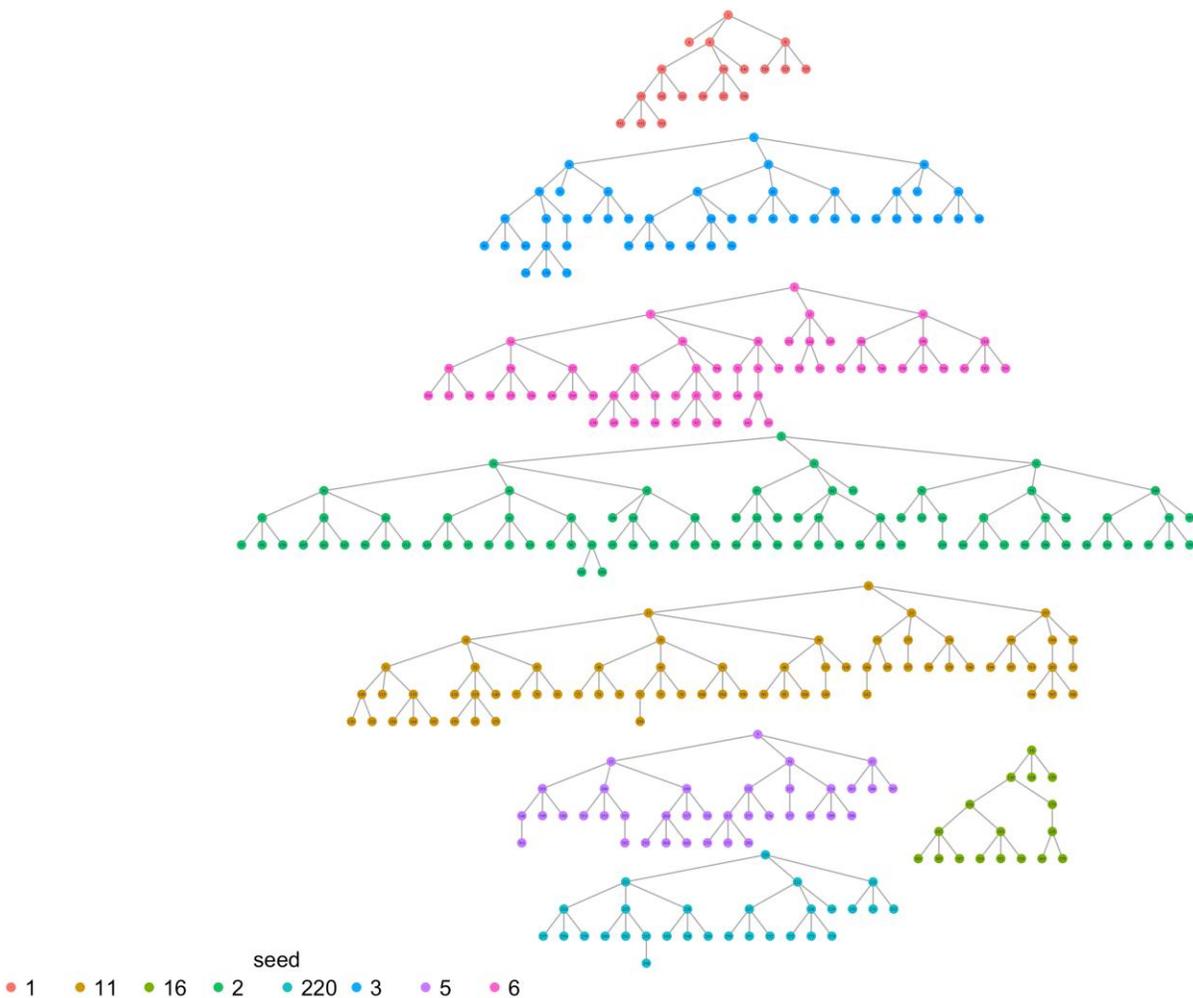
not seek HIV testing/prevention/treatment services because of: Fear of or concern about stigma by staff or neighbours; Fear of or concern about or experienced violence; Fear of or concern about or experienced police harassment or arrest. This Global AIDS Monitoring indicator has changed. Please see Global AIDS Monitoring 2018, pg. 96.

\*  $p < .05$

## Recruitment

Recruitment started with seven initial respondents (seeds), with an additional seed included in the study close to the end of fieldwork. Among them, two seeds were equally productive, accounting for 18.8% and 23.5% of the sample, respectively. The other six seeds were somewhat less productive, with recruitment through them ranging from 5.2% to 16.3% of the total sample.

Figure 8. Recruitment tree – FSW Kandy



**Table 67: Recruitment information**

Characteristic	Responses	Sample proportion n/N (%)
Main reason for participation	Interest in HIV and sexual health	21/362 (5.8)
	HIV test	130/362 (35.9)
	Interest in issues related to FSW	0/362 (0.0)
	Helping the community	0/362 (0.0)
	Friend wanted me to participate	208/362 (57.5)
	Someone forced me	3/362 (0.8)
	Incentive/Gift	0/362 (0.0)
Mode of receiving the coupon	Received the coupon from a friend/ acquaintance	354/362 (97.8)
	Found the coupon laying around somewhere	0/362 (0.0)
	Bought or exchanged it for something	0/362 (0.0)
	Seed (from the IBBS office)	8/362 (2.2)
Acquaintances for:	< 6 months	21/354 (5.9)
	6 months – 1 year	71/354 (20.1)
	> 1 year	262/354 (74.0)
Screener’s confidence that participant is FSW	Confident	361/362 (99.7)
	Somewhat confident	1/362 (0.3)

On average, study participants knew approximately nine other FSW. When asked how many of the FSW they knew who were at least 18 years of age, who lived in Kandy, and whom they had seen in the past one month, on average, study participants knew six other FSW.

**Table 68: Network size questions**

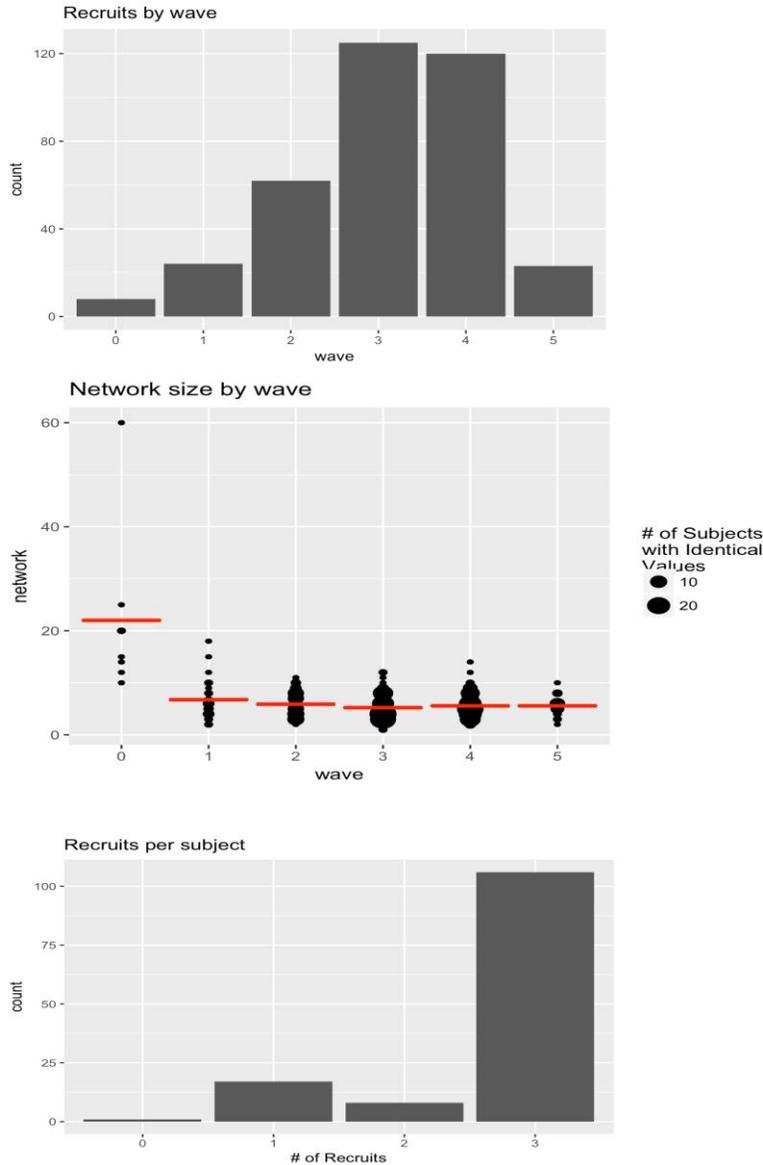
Characteristic	Sample statistics
How many women do you know (they know your name and you know theirs), who have sold sex in the last 12 months?	<i>M (SD)</i> = 8.8 (6.53) Mdn = 8.0 Range = 2 – 100
Of these ___ [number in the previous question] women that you mentioned in the answer to the previous question, how many are above the age of 18?	<i>M (SD)</i> = 8.5 (6.05) Mdn = 7.5 Range = 1 – 90
Of these ___ [number in the previous question] women that you mentioned in the answer to the previous question, how many live, work or study in _____ [city of survey]?	<i>M (SD)</i> = 7.6 (5.26) Mdn = 7.0 Range = 1 – 80
Of these ___ [number in the previous question] women that you mentioned in the answer to the previous question, how many have you seen in the past 1 month? <sup>1</sup>	<i>M (SD)</i> = 5.9 (4.03) Mdn = 5.0 Range = 1 – 60

<sup>1</sup> In the estimation of population frequencies and statistics, this question was used as the network size question.

A total of five waves were reached among FSW in Kandy, with the majority of respondents recruited in waves three and four (34.5% and 33.1%, respectively). As is expected, the average network size is lower in subsequent waves, ranging from 22 in wave zero to 5 or 6 in all subsequent waves.

Overall, recruitment in Kandy went well, with a majority of study participants recruiting in the study three other FSW.

**Figure 9. Recruitment diagnostics – FSW Kandy**



### Biological Indicators

Among FSW in Kandy, there were no positive cases of HIV, Hepatitis B or Hepatitis C. Prevalence of active syphilis by TTPA is 2.5% and VDRL is 0.6%.

**Table 69: Biological test results**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Positive for HIV		0/362 (0.0)	-
Positive for syphilis (VDRL)	Reactive	2/362 (0.6)	0.6 (0.0, 1.5)
Positive for syphilis (TPPA)	Positive	9/362 (2.5)	2.5 (0.7, 4.2)
Positive for syphilis (onsite testing)		9/362 (2.5)	2.5 (0.7, 4.2)
Positive for hepatitis B surface antigen		0/362 (0.0)	-
HIV and hepatitis co-infection		0/362 (0.0)	-

### Socio-Demographic Characteristics

All FSW in Kandy were born in Sri Lanka and have Sri Lankan citizenship. District of residence in the past year was predominantly Kandy (92.2%).

**Table 70: Citizenship and Residence**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Citizenship	Sri Lankan	362/362 (100)	-
Country of birth	Sri Lanka	362/362 (100)	-
District of residence in the past year	Kandy	331/362 (91.4)	92.2 (89.8, 94.7)
	Other <sup>1</sup>	31/362 (8.6)	7.8 (5.3, 10.2)
Primary residence is Kandy		333/362 (92.0)	92.7 (90.2, 95.3)

<sup>1</sup> Among those whose district of residence in the past year was not Kandy, 13/31 said their district of residence was Colombo.

Mean age of FSW in Kandy is 40.7 years, with as many as one-third (35.8%) at least 45 years of age. With regard to ethnicity and language spoken at home, three-quarters (75.3% and 78.9%, respectively) of FSW in Kandy are Sinhalese. Close to a third of FSW in Kandy cannot read and write (28.8%) and as many as one in five FSW in Kandy has never attended formal education (19.1%). Although two-thirds (68.7%) of FSW in Kandy stated they have a source of income other than sex work, a majority of them earn only 20,000-30,000 Sri Lankan Rupees per month (127-194 USD).

**Table 71: Core socio-demographic indicators**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age	Sample <i>M (SD)</i> = 40.9 (10.66) Mdn = 41 N = 362 Range = 21 - 71	Pop. est. <i>M (SD)</i> = 40.7 (10.75) Mdn = 41 - -	-	-
Age groups	18 - 24		27/362 (7.5)	8.0 (4.8, 11.2)
	25 - 34		84/362 (23.2)	22.8 (18.4, 27.4)
	35 - 44		117/362 (32.3)	33.4 (28.6, 38.2)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	≥ 45	134/362 (37.0)	35.8 (30.2, 41.4)
Sex	Woman	362/362 (100)	-
Sex same as at birth		362/362 (100)	-
Ethnicity	Sinhalese	275/362 (76.0)	75.3 (70.6, 80.0)
	Sri Lankan Tamil	76/362 (21.0)	21.4 (17.0, 25.9)
	Indian Tamil	-	-
	Moor/Muslim	11/362 (3.0)	3.2 (1.3, 5.2)
	Burgher	-	-
	Malay	-	-
	Other	-	-
Languages spoken at home (multiple response)	Sinhalese	289/362 (79.8)	78.9 (74.3, 83.5)
	Tamil	76/362 (21.0)	21.9 (17.2, 26.7)
	English	-	-
	Other	3/362 (0.8)	0.9 (0, 1.9)
Can read and write	Yes	263/358 (73.5)	71.2 (66.0, 76.4)
	Rather not say	4/362 (1.1)	-
Completed level of education	Never attended school	63/362 (17.4)	19.1 (14.4, 23.8)
	Grade 1-5	66/362 (18.2)	17.6 (13.6, 21.5)
	Grade 6-10	155/362 (42.8)	42.2 (37.2, 47.8)
	Passed O/L	61/362 (16.9)	16.7 (12.9, 20.5)
	Passed A/L	15/362 (4.1)	3.7 (1.6, 5.8)
	Completed Diploma	2/362 (0.6)	0.5 (0, 0.9)
	Completed Degree	-	-
Earns money doing anything other than sex work (i.e., has other sources of income)	Yes	250/361 (69.3)	68.7 (63.7, 73.6)
	Rather not say	1/362 (0.3)	-
Main activity		-.1	-.1
Income <sup>2</sup>	< 5,000 Rupees	30/362 (8.3)	8.2 (5.2, 11.3)
	5,000-10,000	59/362 (16.3)	16.7 (12.8, 20.7)
	10,001-20,000	66/362 (18.2)	20.0 (15.3, 24.5)
	20,001-30,000	111/362 (30.7)	30.8 (25.6, 35.9)
	30,001-40,000	56/362 (15.5)	13.6 (10.1, 17.1)
	> 40,000 Rupees	40/362 (11.0)	10.8 (7.1, 14.4)

<sup>1</sup> Data not available due to translation error; <sup>2</sup> Central Bank of Sri Lanka currency exchange rate on 28 February 2018 (1 USD = 154.74 Sri Lankan Rs.), available at [http://www.cbsl.gov.lk/htm/english/\\_cei/er/e\\_1.asp](http://www.cbsl.gov.lk/htm/english/_cei/er/e_1.asp)

Slightly over half of FSW in Kandy live in their own home (38.3%) or in their parents' home (18.6%) and as many as one in five (20.1%) lives in a temporary shelter. About half of FSW in Kandy live with their partner/spouse (46.7%) and a majority of FSW in Kandy have at least one child (83.0%).

**Table 72: Household information and family life**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of residence	Temporary shelter Boarding house Parents' home My own home Lodging On the street Brothel Other <sup>1</sup>	71/362 (19.6) 67/362 (18.5) 67/362 (18.5) 146/362 (40.3) 5/362 (1.4) 3/362 (0.8) - 3/362 (0.8)	20.1 (16.0, 24.2) 20.0 (15.7, 24.3) 18.6 (14.1, 23.0) 38.3 (33.1, 45.3) 1.4 (0.2, 2.5) 0.9 (0, 2.0) - 0.7 (0, 1.5)
Number of household members	Sample <i>M (SD) =</i> 3.8 (1.45) <i>Mdn =</i> 4 <i>N =</i> 357 <i>Range =</i> 1 - 12	Pop. est. <i>M (SD) =</i> 3.8 (1.49) <i>Mdn =</i> 4 - -	- -
Number of children currently living in the household	No children One Two Three or more Don't know/Rather not say	111/356 (31.2) 120/356 (33.7) 104/356 (29.2) 21/356 (5.9) 6/362 (1.7)	30.9 (25.6, 36.5) 35.1 (29.8, 40.4) 27.9 (23.3, 32.5) 6.0 (3.5, 8.6) -
Number of children she is a parent or guardian of	No children One Two Three or more Don't know/Rather not say	62/356 (17.4) 95/356 (26.7) 128/356 (36.0) 71/356 (19.9) 6/362 (1.7)	17.0 (12.6, 21.3) 27.4 (22.5, 32.3) 35.1 (30.0, 40.2) 20.5 (16.3, 24.7) -
Marital status	Single (Never married) Married Divorced/Separated Widowed Rather not say	33/360 (9.2) 176/360 (48.9) 88/360 (24.4) 63/360 (17.5) 2/362 (0.6)	8.5 (5.3, 11.7) 46.9 (41.7, 52.2) 25.3 (20.7, 29.9) 19.2 (14.8, 23.7) -
Cohabitation	Living together with a partner/spouse Involved in a relationship without living together Have no relationship/Do not have a partner Rather not say	164/340 (48.2) 21/340 (6.2) 155/340 (45.6) 22/362 (6.1)	46.7 (41.3, 52.2) 6.1 (3.4, 8.7) 47.2 (41.8, 52.7) -
Sex of partner	Woman Man Rather not say	13/184 (7.1) 171/184 (92.9) 1/185 (0.5)	8.5 (0.6, 16.6) 91.5 (83.4, 99.4) -

<sup>1</sup> Son's/daughter's home 2/3

## HIV and AIDS

Only two-thirds of FSW in Kandy have ever heard of HIV/AIDS (67.6%) and among them, a quarter (27.4%) have received the most thorough information about HIV/AIDS from health services and another 14.6% from NGOs. Among FSW in Kandy who have heard of HIV/AIDS, over half (52.1%) have never discussed HIV/AIDS with any of their partners.

**Table 73: General knowledge about HIV/AIDS**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has heard of HIV/AIDS		257/362 (71.0)	67.6 (62.3, 72.9)
Main source of the most thorough understanding of HIV/AIDS	School	11/256 (4.3)	5.4 (1.4, 9.6)
	Health services	76/256 (29.7)	27.4 (21.8, 32.8)
	Workplace	1/256 (0.4)	0.3 (0, 0.8)
	Friends/Family	48/256 (18.8)	18.4 (13.0, 23.6)
	Television	27/256 (10.5)	10.9 (7.1, 14.6)
	Newspaper/Magazines	22/256 (8.6)	8.9 (4.7, 13.1)
	Posters/Billboards	15/256 (5.9)	6.2 (1.7, 10.8)
	Pamphlets/Leaflets	17/256 (6.6)	8.0 (4.1, 12.0)
	Radio	-	-
	NGOs	39/256 (15.2)	14.6 (9.6, 19.5)
	Rather not say	1/257 (0.4)	-
Discussed HIV with any sexual partner	Yes, all	34/257 (13.2)	13.3 (9.1, 17.4)
	Yes, some	92/257 (35.8)	33.9 (28.1, 39.5)
	No, none	129/257 (50.2)	52.1 (45.5, 58.8)
	Don't know	2/257 (0.8)	-
Partner ever disclosed their HIV status	Yes, all	32/126 (25.4)	26.8 (17.6, 36.1)
	Yes, some	77/126 (61.1)	61.4 (50.0, 72.9)
	No, none	17/126 (13.5)	11.8 (0, 26.7)
Knows somebody who is HIV-positive or has died of AIDS		43/257 (16.7)	14.4 (9.8, 18.7)
Close friend or relative died of AIDS	Yes, close relative	-	-
	Yes, close friend	1/257 (0.4)	0.1 (0, 0.1)
	Yes, close relative and close friend	1/257 (0.4)	0.2 (0, 0.5)
	No	244/257 (94.9)	95.9 (93.4, 98.4)
	Don't know	11/257 (4.3)	3.9 (1.4, 6.3)

Among FSW in Kandy who perceive their personal HIV risk as low or none (26.9%), a majority (70.6%) believe so because they always use condoms. FSW in Kandy who perceive their personal HIV risk as moderate or high (40.5%) believe so because they do not always use condoms (80.0%) or because they have had many sexual partners (78.5%).

**Table 74: Perception of personal HIV risk**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Personal HIV risk	No risk	55/361 (15.2)	15.0 (11.0, 18.8)
	Low risk	47/361 (13.0)	11.9 (8.5, 15.2)
	Moderate risk	85/361 (23.5)	22.8 (19.0, 26.7)
	High risk	73/361 (20.2)	17.7 (13.8, 21.7)
	Don't know	101/361 (28.0)	32.6 (26.8, 38.5)
	Rather not say	1/362 (0.3)	-
Reasons for perceiving the risk as moderate or high (multiple response)	Many sexual partners	128/158 (81.0)	78.5 (71.0, 86.0)
	Didn't always use condoms	128/158 (81.0)	80.0 (72.9, 87.2)
	Injected drugs	6/158 (3.8)	3.2 (0.6, 5.8)
	Partner has other partners	62/158 (39.2)	39.6 (31.5, 47.7)
	Don't know	1/158 (0.6)	0.5 (0, 1.3)
Reasons for perceiving no or low risk (multiple response)	Trust my partner/s	41/102 (40.2)	41.7 (31.2, 52.2)
	Always use condoms	72/102 (70.6)	70.6 (61.4, 79.6)
	Don't know	4/102 (3.9)	3.7 (0.6, 6.8)

Among FSW who have ever heard of HIV/AIDS, less than one-third (27.8%) can correctly identify modes of sexual transmission of HIV and reject major misconceptions about transmission HIV. When looking at specific items that the composite indicator consists of, most FSW in Kandy know that a person cannot get HIV by sharing food with someone who is infected (64.7%) and that the risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners (61.8%). Somewhat fewer, 43.9%, also know that a healthy looking person can have HIV.

**Table 75: GAM 5.1 Knowledge about HIV prevention**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners	<u>Among all</u> Yes	228/352 (64.8)	61.8 (57.5, 66.1)
	<u>Among those aged 18 – 24<sup>2</sup></u> Yes	25/27 (92.6)	(93.2 (70.5, 100))
Person can reduce the risk of getting HIV by using a condom every time he/she has sex	<u>Among all</u> Yes	204/353 (57.8)	53.5 (48.9, 58.0)
	<u>Among those aged 18 – 24<sup>2</sup></u> Yes	23/27 (85.2)	(72.7 (54.4, 89.0))
Healthy-looking person can have HIV	<u>Among all</u> Yes	159/353 (45.0)	43.9 (39.2, 48.4)
	<u>Among those aged 18 – 24<sup>2</sup></u> Yes	14/27 (51.9)	(45.5 (30.5, 59.4))
Person can get HIV from mosquito bites	Among all No	195/353 (55.2)	49.7 (45.0, 54.5)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	No	22/27 (81.5)	(67.4 (49.6, 82.4))
Person can get HIV by sharing food with someone who is infected	<u>Among all</u>		
	No	241/353 (68.3)	64.7 (60.3, 69.0)
	<u>Among those aged 18 – 24<sup>2</sup></u>		
	No	24/27 (88.9)	(90.0 (68.5, 100))
GAM 5.1 Composite indicator for knowledge about HIV prevention (1-5 <sup>1</sup> )	<u>Among all</u>		
	# of correct answers		
	None	99/353 (28.0)	31.5 (26.2, 36.9)
	One	3/353 (0.8)	0.7 (0.0, 1.4)
	Two	26/353 (7.4)	8.5 (4.9, 12.0)
	Three	32/353 (9.1)	9.3 (6.4, 12.2)
	Four	89/353 (25.2)	22.2 (18.2, 26.3)
	Five	104/353 (29.5)	27.8 (22.5, 33.1)
	<u>Among those aged 18 - 24<sup>2</sup></u>		
	# of correct answers <sup>3</sup>		
	None	2/27 (7.4)	(6.8)
	One	0/27 (0.0)	-
	Two	1/27 (3.7)	(15.0)
	Three	2/27 (7.4)	(10.6)
Four	10/27 (37.0)	(30.5)	
Five	12/27 (44.4)	(37.1)	
HIV can be transmitted from mother to her unborn child	Yes	259/362 (71.5)	68.9 (63.9, 73.8)
	No	20/362 (5.5)	5.9 (3.0, 8.7)
	Don't know	83/362 (22.9)	25.3 (20.4, 30.1)
Ever heard of ART	Yes	98/362 (27.1)	24.7 (20.1, 29.3)
	No	221/362 (61.0)	63.1 (57.7, 68.4)
	Don't know	43/362 (11.9)	12.2 (8.8, 15.5)

<sup>1</sup> Don't know is recorded as incorrect. Numerator for individual and the composite indicator excludes those who have never heard of HIV/AIDS, while all who had a valid answer to the question regarding whether they had ever heard of HIV/AIDS are included in the denominator. <sup>2</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses. <sup>3</sup> 95% CI cannot be calculated.

Among FSW in Kandy who have ever heard of HIV/AIDS, about a third (36.0%) exhibit a discriminatory attitude towards PLHIV, with somewhat more saying that they would not buy fresh vegetables from a shopkeeper or vendor if she knew that this person had HIV (34.3%) than saying that they think children living with HIV should not be able to attend school with children who are HIV negative (12.2%). Among FSW in Kandy aged between 18 and 49, as well as those aged between 25 and 49 percentages are similar, with 32.4% and 32.0% of them, respectively, exhibiting a discriminatory attitude towards PLHIV.

**Table 76: GAM 4.1 Discriminatory attitudes towards PLHIV, disaggregated by age**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Thinks that children living with HIV should be able to attend school with children who are HIV negative	<u>Among all</u>		
	Yes	189/216 (87.5)	87.8 (83.6, 92.0)
	No	27/216 (12.5)	12.2 (8.0, 16.4)
	Don't know/Not sure/It depends	40/257 (15.6)	-
	Rather not say	1/257 (0.4)	-
	<u>Among those aged 18-49</u>		
	Yes	165/187 (88.2)	88.3 (83.6, 93.1)
	No	22/187 (11.8)	11.7 (6.9, 16.4)
	Don't know/Not sure/It depends	28/216 (13.0)	-
	Rather not say	1/216 (0.5)	-
	<u>Among those aged 25-49 years</u>		
	Yes	147/167 (88.0)	88.0 (82.9, 93.0)
No	20/167 (12.0)	12.0 (7.0, 17.1)	
Don't know/Not sure/It depends	24/191 (12.6)	-	
Would buy fresh vegetables from a shopkeeper or vendor if she knew that this person had HIV?	<u>Among all</u>		
	Yes	136/202 (67.3)	65.7 (57.9, 73.5)
	No	66/202 (32.7)	34.3 (26.5, 42.1)
	Don't know/Not sure/It depends	47/257 (18.3)	-
	Rather not say	8/257 (3.1)	-
	<u>Among those aged 18-49</u>		
	Yes	120/172 (69.8)	68.6 (60.5, 76.5)
	No	52/172 (30.2)	31.4 (23.5, 39.5)
	Don't know/Not sure/It depends	37/216 (17.1)	-
	Rather not say	7/216 (3.2)	-
	<u>Among those aged 25-49 years</u>		
	Yes	107/155 (69.0)	69.5 (61.8, 77.2)
No	48/155 (21.0)	30.5 (22.8, 38.2)	
Don't know/Not sure/It depends	30/191 (15.7)	-	
Rather not say	6/191 (3.1)	-	
GAM 4.1 Composite indicator for discriminatory attitudes towards PLHIV (1-2 <sup>1</sup> )	Responded 'No' to either of the two questions		
	<u>Among all</u>	82/232 (35.3)	36.0 (29.2, 42.7)
	<u>Among those aged 18-49</u>	63/198 (31.8)	32.4 (25.0, 39.8)
	<u>Among those aged 25-49</u>	58/177 (32.8)	32.0 (25.0, 39.1)

<sup>1</sup> Participants who responded don't know/not sure/it depends and those who refused to answer were excluded from the analysis. Numerator: Number of respondents who respond no to either of the two questions; Denominator: Number of all respondents who have heard of HIV. Note: Here as well, Don't know was not excluded from the denominator.

Fewer than two in three (61.2%) FSW in Kandy know where to receive an HIV test, with a majority (51.1%) mentioning government STI clinic as a place that they know offers an HIV test. Although 39.8% of FSW in Kandy have ever tested for HIV, only half of them (17.5%) have received an HIV test within 12 months before the survey was carried out. Among those who ever did receive an HIV test, three-quarters (74.5%) have received their last HIV test at a government STI clinic.

**Table 77: HIV testing**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Knows where to receive an HIV test	Yes	236/357 (66.1)	61.2 (55.6, 67.0)
	Rather not say	5/362 (1.4)	
Places that offer HIV testing (multiple response)	Government clinic – STI	202/356 (56.7)	51.1 (45.3, 57.0)
	Government clinic – non-STI	14/356 (3.9)	3.5 (1.8, 5.2)
	Private clinic	50/356 (14.0)	14.0 (10.4, 17.7)
	Private pharmacy or chemist	3/356 (0.8)	0.7 (0, 1.4)
	Traditional healer/herbalist	-	-
	Don't know any	115/356 (32.3)	37.3 (31.6, 42.9)
	Rather not say	6/362 (1.7)	-
Knows HIV status from an HIV test	No, I have never been tested	102/361 (28.3)	31.7 (26.8, 36.7)
	Yes, I have been tested	155/361 (42.9)	39.8 (34.4, 45.4)
	Don't know	104/361 (28.8)	28.4 (23.5, 33.3)
	Rather not say	1/362 (0.3)	-
Last HIV test	< 6 months	54/155 (34.8)	36.2 (27.8, 44.9)
	6 – 12 months	16/155 (10.3)	7.7 (3.4, 11.6)
	> 12 Months	85/155 (54.8)	56.1 (47.6, 64.6)
Result of last HIV test	Negative	151/155 (97.4)	97.7 (96.0, 99.6)
	Positive	2/155 (1.3)	1.2 (0, 2.4)
	Indeterminate	-	-
	Didn't receive the result	2/155 (1.3)	1.0 (0, 2.4)
GAM 3.4 Composite indicator for knowledge of HIV status <sup>1</sup> (1-3)		70/361 (19.4)	17.5 (13.5, 21.5)
Last HIV test was voluntary	Yes	120/155 (77.4)	79.3 (72.9, 85.9)
	Don't know	2/155 (1.3)	1.7 (0, 3.6)
Place where last HIV test was received	Government clinic – STI	119/154 (77.3)	74.5 (67.9, 80.7)
	Government clinic – non-STI	8/154 (5.2)	4.7 (1.5, 7.9)
	Private clinic	27/154 (17.5)	20.7 (14.7, 27.2)
	Private pharmacy or chemist	-	-
	Traditional healer/herbalist	-	-
	Rather not say	1/155 (0.3)	-

<sup>1</sup> Numerator: Number of respondents who tested HIV-positive or who tested in the past 12 months and the result was negative; Denominator: Number of respondents who provided a valid answer to the question about their knowledge about their HIV status from an HIV test.

Among FSW in Kandy who have never received an HIV test, the majority said that it was because they do not know where to go to receive it (48.1%) or because the testing location is inconvenient

(31.1%). About two in five (41.8%) of FSW in Kandy avoid HIV services because of stigma and discrimination, namely fear or concern about stigma by staff and neighbours (35.5%), fear or concern about or experienced violence (10.4%), and fear or concern about or experienced police harassment or arrest (12.0%).

**Table 78: Reasons for never receiving an HIV test**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Reasons for never receiving an HIV test (multiple response) <sup>1</sup>	Don't know where to go	41/100 (41.0)	48.1 (37.6, 58.7)
	I always use condoms	2/100 (2.0)	1.2 (0.0, 2.6)
	Not at risk of getting HIV	7/100 (7.0)	6.2 (1.8, 10.7)
	Didn't have time/Too busy	9/100 (9.0)	8.7 (3.0, 14.3)
	I trust my partner	6/100 (6.0)	5.0 (1.0, 9.1)
	Afraid of knowing I may be HIV-positive	22/100 (22.0)	19.0 (11.5, 26.3)
	Lack of confidentiality	16/100 (16.0)	15.2 (8.2, 22.2)
	Inconvenient testing location	32/100 (32.0)	31.1 (21.2, 40.9)
	No money	0/100 (0.0)	-
	Don't know	16/100 (16.0)	14.5 (7.8, 21.2)
Rather not say	2/102 (2.0)	-	
Never receiving an HIV test because of stigma and discrimination (multiple response) <sup>1</sup>	Fear or concern about stigma by staff or neighbours	31/89 (34.8)	35.5 (24.9, 46.2)
	Fear of or concern about or experienced violence	10/89 (11.2)	10.4 (4.3, 16.3)
	Fear of or concern about or experienced police harassment or arrest	12/89 (13.4)	12.0 (5.6, 18.5)
	Rather not say	13/102 (12.7)	-
GAM 4.2 Composite indicator for avoidance of HIV services because of stigma and discrimination (1-3)	Did not receive an HIV test because of stigma and discrimination	38/89 (42.7)	41.8 (31.2, 52.5)

<sup>1</sup> Due to an error in routing, 104 women did not answer this question.

## Sexual Behaviour

The first time respondents had vaginal sex, FSW in Kandy were on average 21 years of age, although as many as a quarter (25.7%) of FSW in Kandy were aged under 18 years. Their first sexual partner, however, was on average almost ten years older than them (29 years of age).

**Table 79: General sexual history**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age at first vaginal sex	Sample <i>M (SD)</i> = 20.9 (4.56) Mdn = 21 N = 343 Range = 12 - 38	Pop. est. <i>M (SD)</i> = 20.9 (4.45) Mdn = 21 - -	-	-
	< 18		90/343 (26.2)	25.7 (20.8, 30.6)
Age at first anal sex	Never had anal sex		171/280 <sup>1</sup> (61.1)	61.8 (55.3, 68.2)
	Sample <i>M (SD)</i> = 25.7 (8.02) Mdn = 24 N = 109 Range = 15 - 48	Pop. est. <i>M (SD)</i> = 27.1 (9.13) Mdn = 25 - -	-	-
Age of partner at first sex (vaginal or anal)	Sample <i>M (SD)</i> = 29.5 (7.84) Mdn = 28 N = 302 Range = 18 - 65	Pop. est. <i>M (SD)</i> = 29.4 (7.72) Mdn = 28 - -	-	-

<sup>1</sup> Item non-response was high, at 44.8% (Don't know = 80/362 (22.1) and Rather not say = 82/362 (22.7))

In the week preceding the survey, FSW in Kandy had on average four sexual partners, with over a quarter (27.9%) of them having had five or more sexual partners. A majority of FSW in Kandy (82.0%), in the week preceding the survey, had only paying sexual partners (clients).

**Table 80: Sexual partners in the past 7 days**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of sexual partners (anal or vaginal intercourse)	Sample <i>M (SD)</i> = 4.1 (2.05) Mdn = 4 N = 362 Range = 0 - 15	Pop. est. <i>M (SD)</i> = 4.0 (1.99) Mdn = 4 - -	-	-
	0 - 2		61/362 (16.9)	18.8 (14.6, 23.1)
	3 - 4		187/362 (51.7)	53.4 (48.3, 58.4)
	5 or more		114/362 (31.5)	27.9 (23.0, 32.7)

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of paying partners (clients)	Sample <i>M (SD)</i> = 3.9 (2.05) Mdn = 3 N = 361 Range = 1 - 15	Pop. est. <i>M (SD)</i> = 3.8 (2.00) Mdn = 3 - -	-	-
	1 - 2		77/361 (21.3)	23.5 (18.7, 28.3)
	3 - 4		175/361 (48.5)	50.0 (44.8, 55.2)
	5 or more		109/361 (30.2)	26.5 (21.7, 31.3)
Had sex only with paying partners (clients)			297/360 (82.5)	82.0 (77.8, 86.2)

In the month preceding the survey, FSW in Kandy had on average twelve sexual partners, with about one in five of them (19.6%) having had sixteen or more sexual partners. About two-thirds of FSW in Kandy (68.8%) has in the month preceding the survey only paying sexual partners (clients). Only one in four (26.6%) of FSW in Kandy has consistently used condoms in the month preceding the survey. On average, FSW in Kandy sell sex three days a week, although as many as one-third of them (38.2%) sell sex four or more days in an average week. Finally, in an average day FSW in Kandy sell sex to two paying partners (clients), with about one in ten (10.8%) selling sex to three or more paying partners (clients) in an average day.

**Table 81. Sexual partners in the past 30 days**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of sexual partners (anal or vaginal intercourse)	Sample <i>M (SD)</i> = 12.3 (4.83) Mdn = 12 N = 362 Range = 1 - 35	Pop. est. <i>M (SD)</i> = 12.0 (4.67) Mdn = 12 - -	-	-
	1 - 5		31/362 (8.6)	8.5 (5.7, 11.2)
	6 - 10		102/362(28.2)	31.9 (26.6, 37.3)
	11 - 15		151/362(41.7)	40.1 (34.8, 45.3)
	16 or more		78/362 (21.5)	19.6 (15.5, 23.6)
Reason for not having any sexual partners or clients in the past 30 days	Could not find any clients I am not working as a sex worker anymore Other		-	-
Number of paying partners (clients)	Sample <i>M (SD)</i> = 11.9 (4.91) Mdn = 12	Pop. est. <i>M (SD)</i> = 11.5 (4.79) Mdn = 12	-	-

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
	N = 362 Range = 1 - 35	- -		
	1 - 5 6 - 10 11 - 15 16 or more		43/362 (11.9) 103/362(28.5) 143/362(39.5) 73/362 (20.2)	12.9 (9.2, 16.6) 31.1 (26.2, 36.0) 37.5 (32.7, 42.5) 18.5 (14.6, 22.3)
Had sex only with paying partners (clients)			251/362(69.3)	68.8 (63.6, 73.9)
Use of condoms with paying partners (clients)	Every time Almost every time Sometimes Never Don't know Rather not say		99/358 (27.7) 88/358 (24.6) 95/358 (26.5) 76/358 (21.2) 2/362 (0.6) 2/362 (0.6)	26.6 (21.7, 31.4) 22.1 (17.8, 26.5) 26.8 (21.9, 31.7) 24.5 (19.6, 29.4) - -
Mean number of days per week worked selling sex	Sample <i>M (SD)</i> = 3.3 (1.09) Mdn = 3 N = 360 Range = 0 - 7	Pop. est. <i>M (SD)</i> = 3.2 (1.04) Mdn = 3 - -	-	-
	0 - 2 3 4 or more		80/360 (22.2) 139/360(38.6) 141/360(39.2)	23.4 (18.8, 27.9) 38.5 (33.4, 43.5) 38.2 (32.9, 43.5)
Mean number of paying partners (clients) per day	Sample <i>M (SD)</i> = 2.0 (3.84) Mdn = 1 N = 352 Range = 0 - 30	Pop. est. <i>M (SD)</i> = 1.8 (3.29) Mdn = 1 - -	-	-
	0 1 2 3 or more		53/352 (15.1) 184/352(52.3) 75/352 (21.3) 40/352 (11.4)	15.0 (11.2, 18.8) 55.7 (50.5, 60.9) 18.8 (15.0, 22.5) 10.5 (7.0, 14.0)

When they first received money for sex, FSW in Kandy were on average 30 years old, with as many as one in three (33.4%) of them 35 years of age or older. On average, FSW in Kandy have been working as sex workers for ten years, with about one in three (38.0%) working as a sex worker for five years or less. On average, FSW in Kandy receive 2,364 Sri Lankan Rs. (15.3 USD) for sex, although one-third (33.7%) of them receive fewer than 1,500 Sri Lankan Rs. (10 USD) for sex. Finally, about one half (52.3%) of FSW in Kandy seek paying partners (clients) at outdoor places (sites such as streets, parks, bus stations, taxi stations, etc.). Typically, however, one in three (36.3%) FSW in Kandy find paying partners (clients) at outdoor sites (in the street, park or public transport) and one-quarter (24.8%) typically finds them through an intermediary (pimp, bartender, taxi driver). A majority (88.0%) of FSW in Kandy typically has sex with paying partners (clients) at a hotel or

guest house, with as many as a quarter (25.2%) of FSW in Kandy also typically going to the paying partner's (client's) home.

**Table 82: Transactional sex**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age when first received money for sex	Sample <i>M (SD)</i> = 29.8 (7.34) Mdn = 29 N = 324 Range = 15 - 50	Pop. est. <i>M (SD)</i> = 30.2 (7.70) Mdn = 30 - -	-	-
			10/324 (3.1)	4.0 (1.0, 6.8)
			69/324 (21.3)	19.7 (15.5, 23.9)
			147/324 (45.4)	43.0 (36.8, 49.3)
			86/324 (26.5)	28.7 (23.0, 34.4)
			12/324 (3.7)	4.7 (2.4, 7.0)
Length of time working as a FSW	Sample <i>M (SD)</i> = 10.6 (9.24) Mdn = 8 N = 323 Range = 1 - 48	Pop. est. <i>M (SD)</i> = 10.0 (8.85) Mdn = 7 - -	-	-
	1 - 5		115/323 (35.6)	38.0 (31.9, 44.1)
	6 - 10		83/323 (25.7)	26.8 (21.6, 32.0)
	11 - 15		53/323 (16.4)	14.3 (10.7, 17.8)
	16 - 20		35/323 (10.8)	11.7 (8.0, 15.3)
	21 or more		37/323 (11.5)	9.3 (6.2, 12.4)
Amount of money typically received for sex (in Sri Lankan rupees)	Sample <i>M (SD)</i> = 2,291 (1,232.99) Mdn = 2,000 N = 362 Range = 400 - 7,000	Pop. est. <i>M (SD)</i> = 2,364 (1,337.59) Mdn = 2,000 - -	-	-
	400 - 1,500		124/362(34.3)	33.7 (28.3, 39.1)
	1,501 - 3,000		173/362(47.8)	46.2 (40.9, 51.6)
	3,001 or more		65/362 (18.0)	20.1 (15.4, 24.8)
Amount of money typically received for sex (in USD <sup>1</sup> )	Sample <i>M (SD)</i> = 14.8 (7.97) Mdn = 12.9 N = 362 Range = 2.58 - 45.24	Pop. est. <i>M (SD)</i> = 15.3 (8.64) Mdn = 12.9 - -	-	-
	2.58 - 10		124/362(34.3)	33.7 (28.3, 39.1)
	11 - 20		173/362(47.8)	46.2 (40.9, 51.6)
	21 or more		65/362 (18.0)	20.1 (15.4, 24.8)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Seeks paying partners (clients) at outdoor places (sites such as streets, parks, bus stations, taxi stations, etc.)	Yes	186/360(51.7)	52.3 (47.2, 57.4)
	Don't know	1/362 (0.3)	-
	Rather not say	1/362 (0.3)	-
Typically finds paying partners (clients)	Brothel	1/362 (0.3)	0.2 (0, 0.5)
	Bar, café, disco, or restaurant	34/362 (9.4)	9.5 (6.0, 12.9)
	Hotel	26/362 (7.2)	7.0 (4.2, 9.8)
	Street, park or public transport	125/362(34.5)	36.3 (31.2, 41.5)
	Through friends	34/362 (9.4)	9.6 (6.3, 13.0)
	Internet (e.g. Facebook), chat, or SMS	4/362 (1.1)	1.0 (0, 2.1)
	Motel or Guest House	6/362 (1.7)	2.6 (0.6, 4.8)
	School	-	-
	Party	1/362 (0.3)	0.2 (0, 0.5)
	Service station	6/362 (1.7)	1.5 (0.4, 2.6)
	Through an intermediary (pimp, bartender, taxi driver)	101/362(27.9)	24.8 (20.4, 29.3)
	Truck stop	6/362 (1.7)	2.0 (0, 4.0)
	Spa / Salon / Massage Parlour	8/362 (2.2)	1.9 (1.0, 2.8)
Using a mobile phone (give phone number out to people)	10/362 (2.8)	3.3 (1.2, 5.3)	
Typically has sex with paying partners (clients) (multiple response)	At a brothel	23/362 (6.4)	5.3 (3.2, 7.4)
	At a hotel or guest house	325/362(89.8)	88.0 (84.6, 91.5)
	At a massage parlour	31/362 (8.6)	8.0 (5.0, 11.0)
	At her own home	28/362 (7.7)	7.2 (4.6, 9.8)
	At the paying partner's (client's) home	78/362 (21.5)	25.2 (20.5, 29.8)
	In a car	36/362 (9.9)	10.6 (7.4, 13.8)
	In a park	48/362 (13.3)	13.6 (10.0, 17.3)
Other location	1/362 (0.3)	0.2 (0, 0.5)	

<sup>1</sup> Central Bank of Sri Lanka currency exchange rate on 28 February 2018 (1 USD = 154.74 Sri Lankan Rs.), available at [http://www.cbsl.gov.lk/htm/english/\\_cei/er/e\\_1.asp](http://www.cbsl.gov.lk/htm/english/_cei/er/e_1.asp)

At last sex with a paying partner (client) only slightly over half (57.1%) of FSW in Kandy have used a condom. Among those who have not used a condom, the main reasons were never having heard of a condom (46.1%) and partner objecting to using a condom (38.0%), although as many as one fifth (22.8%) have not used a condom because they do not think it is necessary.

**Table 83. Last Paying Partner (Client)**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
GAM 3.6 Used a condom at last sex with a client	Yes	207/343 (60.3)	57.1 (50.8, 63.2)
	Don't remember	14/362 (3.9)	-
	Rather not say	5/362 (1.4)	-
Reasons for not using a condom (multiple response)	Never heard of condoms	59/136 (43.4)	46.1 (36.8, 55.5)
	Don't know how to obtain a condom	7/136 (5.1)	5.3 (1.3, 9.1)
	I didn't think it was necessary	36/136 (26.5)	22.8 (16.0, 29.8)
	I didn't think of it	22/136 (16.2)	13.9 (8.3, 19.5)
	Not available	26/136 (19.1)	17.1 (10.6, 23.4)
	Too expensive	1/136 (0.7)	1.5 (0, 4.6)
	Partner objected	49/136 (36.0)	38.0 (28.3, 47.4)
	Don't like them	17/136 (12.5)	12.4 (7.0, 17.7)
	Used another contraceptive	8/136 (5.9)	6.0 (2.1, 9.8)
	Used other prevention methods	-	-
	Partner was a faithful client	11/136 (8.1)	8.4 (3.6, 13.2)
	Partner was a regular client	4/136 (2.9)	2.6 (0.1, 5.0)
	Condoms take away pleasure	6/136 (4.4)	4.9 (0.8, 8.8)
Don't know	2/136 (1.5)	1.6 (0, 3.2)	
Nationality of the last paying partner (client)	Sri Lankan	349/362 (96.4)	95.7 (93.4, 97.9)
	Other <sup>1</sup>	13/362 (3.6)	4.3 (2.1, 6.6)
HIV status of the past paying partner (client)	HIV-negative	133/361 (36.8)	34.0 (28.7, 39.3)
	HIV-positive	-	-
	I did not know/ask	228/361 (63.2)	66.0 (60.7, 71.3)

<sup>1</sup> English 5/13, "Muslim" 4/13, Indian 2/13, Chinese 1/13, Italian 1/13

Only about half (59.3%) of FSW in Kandy have ever had a regular, non-paying sexual partner. Among those who have, in the month preceding the survey, FSW in Kandy had on average one regular, non-paying sexual partner, although as many as one in three (29.1%) has not had a regular, non-paying sexual partner. When looking at only those FSW in Kandy who have had a regular, non-paying sexual partner in the month preceding the survey, only 4.4% have consistently used condoms with their partner. Slightly more (16.9%) have, however, used a condom at last sex with a regular, non-paying sexual partner. Among those who have had a regular, non-paying sexual partner in the month preceding the survey and who did not use a condom at last sex, most FSW in Kandy did so because their partner was faithful (47.1%) or because their partner objected (45.6%). Many also did not use a condom either because they did not think it was necessary (20.6%) or because they do not like condoms (19.9%).

**Table 84: Sexual activity with regular (non-paying) partners in the past 30 days**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Never had a regular (non-paying) partner		136/355 (38.3)	40.7 (35.4, 45.9)
Number of regular (non-paying) partners	Sample <i>M (SD)</i> = 1.4 (2.54) Mdn = 1 N = 219 Range = 0 - 25	Pop. est. <i>M (SD)</i> = 1.4 (2.70) Mdn = 1 - -	- -
	0	70/219 (32.0)	29.1 (23.0, 34.9)
	1	91/219 (41.6)	42.4 (35.5, 49.3)
	2	41/219 (18.7)	21.0 (14.9, 27.4)
	3 or more	17/219 (7.8)	7.5 (3.9, 11.1)
Use of condoms with regular (non-paying) partner	Every time	8/149 (5.4)	4.4 (0.9, 7.9)
	Almost every time	15/149 (10.1)	9.9 (4.9, 14.9)
	Sometimes	55/149 (36.9)	37.3 (29.2, 45.2)
	Never	71/149 (47.7)	48.4 (39.8, 57.2)
Used a condom at last sex with a regular (non-paying) partner	Yes	27/144 (18.8)	16.9 (9.8, 23.8)
	Rather not say	5/149 (3.4)	-
Reasons for not using a condom (multiple response)	Never heard of condoms	15/117 (12.8)	12.7 (6.6, 18.8)
	Don't know how to obtain a condom	3/117 (2.6)	2.1 (0, 4.1)
	I didn't think it was necessary	24/117 (20.5)	20.6 (11.7, 30.1)
	I didn't think of it	20/117 (17.1)	14.3 (8.3, 20.3)
	Not available	13/117 (11.1)	8.7 (4.4, 13.1)
	Too expensive	2/117 (1.7)	1.5 (0, 3.7)
	Partner objected	54/117 (46.2)	45.6 (35.8, 55.5)
	Don't like them	26/117 (22.2)	19.9 (12.3, 27.5)
	Used another contraceptive	20/117 (17.1)	20.6 (12.7, 28.4)
	Used other prevention methods	1/117 (0.9)	1.0 (0, 2.9)
	Partner was faithful	50/117 (42.7)	47.1 (36.3, 57.9)
	Condoms take away pleasure	24/117 (20.5)	21.9 (13.0, 30.4)

### Use of Condoms and Lubricants

Close to 15% (14.4%) of FSW in Kandy have never heard of condoms. Among those who have, most (92.4%) also know where to obtain condoms. Specifically, FSW in Kandy most often obtain condoms neighbourhood markets/stands (66.6%) and from pharmacies/chemists (50.7%). About half of FSW in Kandy also obtain condoms from their friends (32.7%) and from their sex partners (21.3%). Importantly, only one in five (19.8%) FSW in Kandy believe condoms are affordable. About the same proportion of FSW in Kandy have ever heard of female condoms and lubricant (33.6% and 32.0%, respectively). Among those who have ever heard of female condom, very few have ever used it

(6.5%). Similarly, among FSW in Kandy who have ever heard of lubricant, close to half (42.7%) never use it.

**Table 85: Use of condoms and lubricants**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of condoms	Yes	310/353 (87.8)	85.6 (81.3, 89.8)
	Don't know	7/362 (1.9)	-
	Rather not say	2/362 (0.6)	-
Knows where to obtain condoms	Yes	284/304 (93.4)	92.4 (88.2, 96.6)
	Rather not say	6/310 (1.7)	-
Usually obtains condoms from: (multiple response)	Government clinic - STD clinic	68/284 (23.9)	22.0 (17.0, 27.0)
	Govt. clinic - Not STD clinic	3/284 (1.1)	1.2 (0, 2.6)
	Private clinic	21/284 (7.4)	5.4 (3.2, 7.5)
	Private pharmacy or chemist	148/284 (52.1)	50.7 (44.4, 57.0)
	Traditional healer/herbalist	-	-
	Neighbourhood market/stand	179/284 (63.0)	66.6 (61.2, 71.9)
	Friends	101/284 (35.6)	32.7 (27.3, 38.0)
	Sex partner/s	56/284 (19.7)	21.3 (16.2, 26.4)
	Bar / Nightclub	8/284 (2.8)	2.4 (1.1, 3.8)
	NGOs/ outreach service	51/284 (18.0)	16.3 (11.9, 20.6)
	Service station(s)	1/284 (0.4)	0.2 (0, 0.6)
Affordability of male condoms	I do not use condoms	-	-
	Affordable	58/308 (18.8)	19.8 (14.6, 25.0)
	Somewhat affordable	100/308 (32.5)	30.4 (25.3, 35.4)
	Not affordable	122/308 (39.6)	40.6 (34.7, 46.4)
	Don't know	28/308 (9.1)	9.2 (5.1, 13.5)
Ever heard of a female condom	Rather not say	2/310 (0.6)	-
	Yes	129/346 (37.3)	33.6 (28.2, 39.0)
Ever used a female condom	Don't know	16/362 (4.4)	-
		7/129 (5.4)	6.5 (1.4, 11.8)
Ever heard of lubricants			
	Yes	107/312 (34.3)	32.0 (26.7, 37.3)
	Don't know	41/362 (11.3)	-
Frequency of lubricant use during vaginal or anal sex	Rather not say	9/362 (2.5)	-
	Always	8/104 (7.7)	7.1 (3.3, 10.9)
	Usually	16/104 (15.4)	15.7 (4.5, 26.6)
	Sometimes	23/104 (22.1)	25.3 (16.0, 34.9)
	Rarely	9/104 (8.7)	9.3 (3.2, 15.4)
	Never	48/104 (46.2)	42.7 (28.8, 56.4)
Type of lubricant used (multiple response)	Rather not say	3/107 (0.8)	-
	Glycerine	3/55 (5.5)	4.3 (0, 8.9)
	Saliva or water	38/55 (69.1)	70.0 (58.2, 81.9)
	Vaseline	4/55 (7.3)	5.8 (0.9, 10.7)
	Baby oil	30/55 (54.5)	54.3 (40.5, 68.2)
	Lotion	16/55 (29.1)	28.1 (16.3, 39.9)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Other oil	5/55 (9.1)	8.8 (1.7, 15.9)
	Water-based	2/55 (3.6)	3.1 (0, 6.8)
	Silicone-based	-	-
	Soap	1/55 (1.8)	1.2 (0, 3.2)
	Whatever we get from peer educator(s), don't know what it is	-	-
	Rather not say	1/56 (1.8)	-

### Sexually Transmitted Infections

About three in four (71.6%) FSW in Kandy have ever heard of diseases that can be transmitted sexually. With regard to recognizing and describing symptoms of an STI, most of them know that itching and genital discharge in women (70.4% and 53.4%, respectively) and in men (69.7% and 55.1%, respectively) indicates a possible sexually transmitted infection. Very few (6.8%) have received an STI diagnosis in the year preceding the survey.

**Table 86: Sexually transmitted infections**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of diseases that can be transmitted sexually	Yes	269/355 (75.8)	71.6 (66.2, 76.2)
	Don't know	5/362 (1.4)	-
	Rather not say	2/362 (0.6)	-
Can describe symptoms of sexually transmitted infections in women (multiple response)	1. Abdominal pain	67/263 (25.5)	22.5 (17.3, 27.6)
	2. Abnormal genital discharge	152/263 (57.8)	53.4 (47.0, 59.7)
	3. Burning pain on urination	68/263 (25.9)	24.1 (18.4, 29.9)
	4. Genital ulcers or sores	113/263 (43.0)	41.9 (35.3, 48.3)
	5. Swelling in groin area	92/263 (35.0)	33.3 (27.1, 39.5)
	6. Itching	187/263 (71.1)	70.4 (64.4, 76.6)
	Don't know any	4/263 (1.5)	3.9 (0.1, 7.9)
Symptoms mentioned (0-6)	Rather not say	6/269 (2.2)	-
	0	4/263 (1.5)	3.8 (0.2, 7.5)
	1	35/263 (13.3)	15.1 (10.3, 19.9)
	2	83/263 (31.6)	30.5 (24.7, 36.2)
	3	100/263 (38.0)	37.4 (31.0, 43.8)
	4	30/263 (11.4)	9.5 (6.3, 12.7)
	5	8/263 (3.0)	3.0 (0.8, 5.2)
Can describe symptoms of sexually transmitted infections in women (multiple response)	6	3/263 (1.1)	0.7 (0, 1.5)
	1. Genital discharge	149/261 (57.1)	55.1 (48.7, 61.5)
	2. Burning pain on urination	68/261 (26.1)	23.8 (18.2, 29.5)
	3. Genital ulcers or sores	126/261 (48.3)	48.0 (41.1, 55.0)
	4. Swelling in groin area	73/261 (28.0)	27.0 (21.2, 32.8)
	5. Itching	186/261 (71.3)	69.7 (63.5, 75.9)
	Don't know any	10/261 (3.8)	5.7 (1.6, 9.9)
Symptoms mentioned	Rather not say	8/269 (3.0)	-
	0	10/261 (3.8)	5.8 (1.6, 9.9)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
(0-6)	1	39/261 (14.9)	15.6 (10.5, 20.7)
	2	104/261 (39.8)	38.2 (32.2, 44.3)
	3	85/261 (32.6)	32.7 (26.7, 38.8)
	4	15/261 (5.7)	4.9 (2.4, 7.4)
	5	8/261 (3.1)	2.8 (0.9, 4.6)
Tested for sexually transmitted diseases in the past 3 months	Yes	84/353 (23.2)	21.3 (16.9, 25.8)
	Don't know	7/362 (1.9)	-
	Rather not say	2/362 (0.6)	-
Received an STI diagnosis in the past 12 months	Yes	18/265 (5.0)	6.8 (3.5, 10.2)
	Don't know	4/269 (1.5)	-
Had a discharge or genital ulcer (sore) in the last 12 months	Yes	14/354 (3.9)	2.9 (1.4, 4.3)
	Don't know	7/362 (1.7)	-
	Rather not say	1/362 (0.3)	-
Sought treatment		9/14 <sup>1</sup> (64.3)	-
Places where treatment was sought (multiple response)	Government clinic - STD clinic	8/9 <sup>1</sup> (88.9)	-
	Govt. clinic - Not STD clinic	-	-
	Private clinic	-	-
	Private pharmacy or chemist	-	-
	Traditional healer/herbalist	1/9 <sup>1</sup> (11.1)	-
	I used medicine or herbs from home	-	-
Reasons for seeking treatment from that source (multiple response)	Confidentiality	3/9 <sup>1</sup> (33.3)	-
	Affordability	1/9 <sup>1</sup> (11.1)	-
	Recommended by friend or acquaintance	5/9 <sup>1</sup> (55.6)	-
	Quality and/or specialized care given at this place	-	-
	Knows the caregivers	-	-
	Known friendliness of the caregivers	1/9 <sup>1</sup> (11.1)	-
	Proximity/location	1/9 <sup>1</sup> (11.1)	-
	Don't know	1/9 <sup>1</sup> (11.1)	-
Reasons for not seeking treatment (multiple response)	Didn't know where to go for treatment	1/5 <sup>1</sup> (0.2)	-
	Embarrassed or afraid to seek treatment	4/5 <sup>1</sup> (0.8)	-
	Could not afford treatment	-	-
	Unable to get transportation	-	-
	Didn't think I needed it	3/5 <sup>1</sup> (0.6)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Prevention Programs

Among FSW in Kandy who had ever tested for HIV, almost all (85.1%) have told their counsellor/health care provider that they exchange sex for money at their last HIV testing. In addition, two-thirds (64.2%) of them were satisfied or very satisfied with the quality of services provided at the place where they received their last HIV test.

**Table 87: Contact with healthcare providers**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
<b>STI treatment</b>			
Told the healthcare provider that they exchange sex for money when the last treatment for any symptom of an STI or a diagnosis for an STI was received		9/9 <sup>1</sup> (100)	-
Satisfaction with how the healthcare provider treated them during this last visit	Very satisfied	5/9 <sup>1</sup> (55.6)	-
	Somewhat satisfied	2/9 <sup>1</sup> (22.2)	-
	Not satisfied	1/9 <sup>1</sup> (11.1)	-
	Don't know	1/9 <sup>1</sup> (11.1)	-
<b>HIV testing</b>			
Told the counsellor/health care provider that they exchange sex for money when last HIV test was received		135/155 (78.1)	85.1 (78.1, 91.8)
Satisfaction with the quality of services provided at the place where the last HIV test was received	Very satisfied	31/155 (20.0)	19.8 (10.3, 28.9)
	Satisfied	77/155 (49.7)	44.4 (35.0, 53.6)
	A little satisfied	41/155 (26.5)	32.3 (22.4, 42.7)
	Not satisfied	5/155 (3.2)	2.9 (0.4, 5.2)
	Don't know	1/155 (0.6)	0.7 (0, 2.3)

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

In the year preceding the survey, one in three (36.9%) FSW in Kandy had sought medical care, with very few (2.0%) of them experiencing any difficulty getting medical care when they sought it. Finally, almost all (90.9%) FSW in Kandy have ever been pregnant, although fewer than half of them (40.1%) visited an ANC for prenatal care during their most recent pregnancy.

**Table 88: Use of healthcare services in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sought medical care for any reason	Yes	145/360 (40.3)	36.9 (32.1, 41.7)
	Don't know	1/362 (0.3)	-
	Rather not say	1/362 (0.3)	-
Had difficulty getting medical care when they sought it		3/145 (2.1)	2.0 (0.5, 3.4)
Type of difficulty (multiple response)	Too expensive	-	-
	Too far away	-	-
	Could not take time from work	-	-
	Long waiting times	1/1 <sup>1</sup> (100)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Rather not say	2/3 (66.7)	-
Ever been pregnant	Yes	323/356 (90.7)	90.9 (87.2, 94.6)
	Rather not say	6/362 (1.7)	-
Visited an ANC for prenatal care during most recent pregnancy	Yes	138/322 (42.9)	40.1 (34.6, 45.6)
	Don't know	39/322 (12.1)	11.5 (7.9, 15.2)
	Rather not say	1/323 (0.3)	-
Offered an HIV test at the ANC or maternity during most recent pregnancy	Yes	21/137 (15.3)	13.5 (7.0, 19.7)
	Don't know	51/137 (37.0)	38.1 (30.2, 46.3)
	Rather not say	1/138 (0.7)	-
HIV status during most recent pregnancy	Negative	132/322 (41.0)	36.7 (30.8, 42.5)
	Positive	1/322 (0.3)	0.3 (0, 0.8)
	Don't know	189/322 (58.7)	63.0 (57.3, 68.8)
	Rather not say	1/323 (0.3)	-
Received a course of treatment that can prevent the baby from infection	No	1/1 <sup>1</sup> (100)	-
Baby received a dose/course of treatment to prevent infection	Don't know	1/1 <sup>1</sup> (100)	-

Very few (13.6%) FSW in Kandy have been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the three months preceding the survey. Among those who have, most have received general HIV/STI prevention/transmission information (77.3%) or condoms and lubricants (75.0%), or counselling on condom use and safe sex (63.7%). In addition, one in five (20.1%) FSW in Kandy has tested for an STI in the three months preceding the survey. Coverage by HIV prevention programs, defined as receipt of at least two interventions (i.e., Given condoms and lubricant; Counselling on condom use and safe sex; Received an STI test) in the past three months, remains low, at 9.6%.

**Table 89: Coverage of HIV prevention programs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the past 3 months	Yes	52/356 (14.6)	13.6 (9.7, 17.4)
	Don't know	5/362 (1.4)	-
	Rather not say	1/362 (0.3)	-
Services received (multiple response)	General HIV/STI prevention/transmission information	41/52 (78.8)	77.3 (64.2, 90.6)
	Condoms and lubricants	41/52 (78.8)	75.0 (62.4, 88.2)
	Referral for STI treatment	30/52 (57.7)	56.8 (42.7, 70.8)
	Referral for VCT	12/52 (23.1)	25.2 (10.8, 39.3)
	Counselling on condom use and safe sex	32/52 (61.5)	63.7 (49.7, 77.4)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Tested for sexually transmitted diseases in the past 3 months	Yes	84/353 (23.2)	21.3 (16.9, 25.8)
	Don't know	7/362 (1.9)	-
	Rather not say	2/362 (0.6)	-
GAM 3.7 Coverage of HIV prevention programs <sup>1</sup>		39/362 (10.8)	9.6 (6.5, 12.6)

<sup>1</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Received an STI test)

### Experiences of Discrimination and Violence on the basis of being a FSW

Very few FSW in Kandy have been refused health care (1.2%) or police assistance (1.5%) on the basis of being a FSW. Verbal and sexual violence against them, however, is high, with 15.8% having experienced verbal insults and 15.5% having been sexually assaulted or raped. Among FSW in Kandy who have been sexually assaulted or raped, in most cases their assailant was either their regular, non-paying partner (27.3%) or a pimp (27.7%). Following the sexual assault/rape, only 1.1% of FSW in Kandy had sought medical treatment and none reported it to the police.

**Table 90: Experiences of Discrimination and Violence on the basis of being a FSW**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Refused health care	Yes	5/360 (1.4)	1.2 (0.2, 2.1)
	No	255/360 (98.6)	98.8 (97.8, 99.8)
	Don't know	2/362 (0.6)	-
Refused police assistance	Yes	7/359 (1.9)	1.5 (0.4, 2.4)
	No	352/359 (98.1)	98.5 (97.6, 99.5)
	Don't know	2/362 (0.6)	-
	Rather not say	1/362 (0.3)	-
Verbally insulted	Yes	62/360 (17.2)	15.8 (12.1, 19.5)
	No	298/360 (82.8)	84.2 (80.4, 87.9)
	Rather not say	2/362 (0.6)	-
Hit, kicked, or beaten	Yes	20/361 (5.5)	4.9 (2.8, 6.9)
	No	341/361 (94.5)	95.1 (93.1, 97.2)
	Rather not say	1/362 (0.3)	-
Sexually assaulted or raped	Yes	55/361 (15.2)	15.5 (11.6, 19.3)
	No	306/361 (84.8)	84.5 (80.7, 88.4)
	Rather not say	1/362 (0.3)	-
Sexual assailant/rapist	Stranger	14/55 (25.5)	25.0 (11.8, 37.9)
	Social acquaintance	2/55 (3.6)	4.2 (0, 20.1)
	Family/relative	3/55 (5.5)	5.4 <sup>1</sup>
	Police	2/55 (3.6)	3.5 <sup>1</sup>
	Paying sexual partner (Client)	5/55 (9.1)	6.9 <sup>1</sup>
	Other se worker	-	-
	Pimp	12/55 (21.8)	27.7 (11.8, 44.7)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Non-paying partner or boyfriend/girlfriend	17/55 (30.9)	27.3 (0, 58.4)
Sought medical treatment for sexual assault/rape		1/55 (1.8)	1.1 <sup>1</sup>
Reported sexual assault/rape to the police		0/55 (0.0)	-

<sup>1</sup> 95% CI cannot be calculated.

**Use of Alcohol and Drugs**

Approximately one in five (21.9%) FSW in Kandy has ever had a drink containing alcohol, and among those who have, most have a drink containing alcohol about once a week (40.1%), making alcohol consumption among FSW in Kandy very low.

**Table 91: Alcohol consumption**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had a drink containing alcohol	Yes	86/361 (23.8)	21.9 (17.5, 26.4)
	Rather not say	1/362 (0.3)	-
Alcohol consumption in the past month	I never drink alcohol	-	-
	Every day	11/83 (13.3)	17.3 (5.4, 30.2)
	Less than once a week	13/83 (15.7)	15.3 (3.3, 27.3)
	At least once a week	34/83 (41.0)	40.1 (29.1, 50.9)
	Never in the past month	23/83 (27.7)	24.5 (13.1, 35.2)
	Don't know	2/83 (2.4)	2.8 (0, 8.0)
	Rather not say	3/86 (3.5)	-

Hardly any FSW in Kandy had ever used non-prescribed/illicit drugs, with less than one percent (0.9%) ever had injected drugs for non-medical purposes.

**Table 92: Use of non-prescribed/illicit drugs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of drug used			
Heroin	<i>Frequency of consumption</i>		
	Did not use this drug in the last 12 months	1/361 (0.3)	0.3 (0, 0.6)
	Monthly or less	-	-
	Several times a month	1/361 (0.3)	0.3 (0, 0.9)
	Two to four times a month	-	-
	Two to three times a week	-	-
	Four or more times a week	-	-
	Have never used	324/361 (89.8)	89.4 (86.2, 92.6)
	35/361 (9.7)	10.1 (7.0, 13.2)	

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Don't know <sup>1</sup> Rather not say	1/362 (0.3)	-
Cannabis	<i>Frequency of consumption</i> Did not use this drug in the last 12 months Monthly or less Several times a month Two to four times a month Two to three times a week Four or more times a week Have never used Don't know <sup>1</sup> Rather not say	- - - - - - - 309/359 (86.1) 50/359 (13.9) 3/362 (0.8)	- - - - - - - 86.0 (82.4, 89.6) 14.0 (10.5, 17.6) -
Cocaine	<i>Frequency of consumption</i> Did not use this drug in the last 12 months Monthly or less Several times a month Two to four times a month Two to three times a week Four or more times a week Have never used Don't know <sup>1</sup> Rather not say	- - - - - - - 318/360 (88.3) 42/360 (11.7) 2/362 (0.6)	- - - - - - - 88.3 (85.1, 91.6) 11.7 (8.4, 14.9) -
Ecstasy	<i>Frequency of consumption</i> Did not use this drug in the last 12 months Monthly or less Several times a month Two to four times a month Two to three times a week Four or more times a week Have never used Don't know <sup>1</sup> Rather not say	- - - - - - - 296/359 (82.5) 63/359 (17.5) 3/362 (0.8)	- - - - - - - 82.4 (78.4, 86.3) 17.6 (13.7, 21.6) -
Amphetamines	<i>Frequency of consumption</i> Did not use this drug in the last 12 months Monthly or less Several times a month Two to four times a month Two to three times a week Four or more times a week Have never used	- - - - - - - 290/358 (81.0)	- - - - - - - 80.7 (76.7, 84.6)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Don't know <sup>1</sup>	68/358 (19.0)	19.3 (15.4, 23.4)
	Rather not say	4/362 (1.1)	-
Opium	<i>Frequency of consumption</i>		
	Did not use this drug in the last 12 months	-	-
	Monthly or less	-	-
	Several times a month	-	-
	Two to four times a month	-	-
	Two to three times a week	-	-
	Four or more times a week	-	-
	Have never used	311/358 (86.9)	85.9 (82.1, 89.7)
	Don't know <sup>1</sup>	47/358 (13.1)	14.1 (10.3, 17.9)
	Rather not say	4/362 (1.1)	-
Hashish	<i>Frequency of consumption</i>		
	Did not use this drug in the last 12 months	-	-
	Monthly or less	-	-
	Several times a month	-	-
	Two to four times a month	-	-
	Two to three times a week	-	-
	Four or more times a week	-	-
	Have never used	311/361 (86.1)	85.4 (81.7, 89.1)
	Don't know <sup>1</sup>	50/3361 (13.9)	14.6 (10.9, 18.3)
	Rather not say	1/362 (0.3)	-
Other drugs	<i>Frequency of consumption</i>		
	Did not use this drug in the last 12 months	-	-
	Monthly or less	4/359 (1.1)	0.7 (0, 1.3)
	Several times a month	5/359 (1.4)	1.1 (0.2, 2.0)
	Two to four times a month	5/359 (1.4)	1.2 (0.1, 2.3)
	Two to three times a week	8/359 (2.2)	1.6 (0.6, 2.6)
	Four or more times a week	6/359 (1.7)	1.9 (0.5, 3.3)
	Have never used	298/359 (83.0)	83.8 (79.9, 87.6)
	Don't know <sup>1</sup>	33/359 (9.2)	9.7 (6.5, 12.8)
	Rather not say	3/362 (0.8)	-

<sup>1</sup> For each of the type of drug there is a significant proportion of the response 'Don't know.' Although it is possible that it refers to not knowing the frequency of drug use, it is more likely that it indicates never have heard of the particular type of drug.

**Table 93: Use of non-prescribed/illicit drugs by injection**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever injected drugs for non-medical purposes		4/362 (1.1)	0.9 (0.1, 1.7)
Ever used non-sterile injecting equipment when injecting drugs		2/4 <sup>1</sup> (50.0)	-
Safe injecting practice <sup>2</sup>	No	2/2 <sup>1</sup> (100)	-
	Don't know	1/4 (25.0)	-
	Rather not say	1/4 (25.0)	-

**Table 94: Use of non-prescribed/illicit drugs by injection in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Injected drugs for non-medical purposes in the past 12 months	No	4/4 <sup>1</sup> (100)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Media

Regarding media use, FSW in Kandy most frequently watch TV (most days or every day: 80.7%) or listen to the radio (most days or every day: 72.2%). Very few read the newspaper (never: 65.0%) or use the Internet (never: 75.1%). Finally, three-quarters (75.5%) of FSW in Kandy have a mobile phone.

**Table 95: Use of media in the past 30 days**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Radio	Never	70/335 (20.9)	20.2 (15.9, 24.4)
	Once a month	5/335 (1.5)	1.5 (0.2, 2.7)
	Once a week	14/335 (4.2)	5.2 (2.1, 8.1)
	Most days	187/335 (55.8)	56.0 (50.8, 61.3)
	Every day	55/335 (16.4)	16.2 (12.2, 20.2)
	Don't know	4/335 (1.2)	0.9 (0.1, 1.8)
	Rather not say	27/362 (7.5)	-
TV	Never	48/359 (13.4)	15.2 (10.8, 19.6)
	Once a month	1/359 (0.3)	0.1 (0, 0.3)
	Once a week	10/359 (2.8)	2.6 (1.1, 4.2)
	Most days	166/359 (46.2)	45.7 (40.2, 51.3)
	Every day	129/359 (35.9)	35.0 (30.0, 39.9)
	Don't know	5/359 (1.4)	1.4 (0.2, 2.5)
	Rather not say	3/362 (0.8)	-
Newspaper	Never	213/327 (65.1)	65.0 (59.7, 70.2)
	Once a month	14/327 (4.3)	3.8 (1.8, 5.9)
	Once a week	24/327 (7.3)	6.6 (4.0, 9.2)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Most days	72/327 (22.0)	23.4 (18.8, 28.1)
	Every day	3/327 (0.9)	0.5 (0, 1.0)
	Don't know	1/327 (0.3)	0.7 (0, 1.7)
	Rather not say	35/362 (9.7)	-
Internet	Never	261/344 (75.9)	75.1 (70.1, 80.0)
	Once a month	4/344 (1.2)	1.1 (0.3, 1.9)
	Once a week	3/344 (0.9)	1.2 (0.1, 2.2)
	Most days	53/344 (15.4)	15.5 (11.1, 19.9)
	Every day	20/344 (5.8)	6.3 (3.5, 9.1)
	Don't know	3/344 (0.9)	0.9 (0.0, 1.7)
	Rather not say	18/362 (5.0)	-
Has a mobile phone		281/362 (77.6)	75.5 (70.7, 80.4)

### Multiplier questions

In June or July 2017, 11% of FSW in Kandy received any services (educational leaflets, condoms, HIV counselling) from the NGO Laksetha Sahana Sewa. Even fewer (6.5%) received condoms from the same NGO and 4.2% were escorted by NGO Laksetha Sahana Sewa's staff to an STI clinic. Slightly more, however, received a purse by peer educators during their outreach work in October 2017.

**Table 96: Multiplier questions**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Received any services (educational leaflets, condoms, HIV counselling) from the NGO Laksetha Sahana Sewa in Kandy in May, June or July 2017		45/362 (12.4)	11.0 (7.9, 14.1)
Received condoms from the NGO Laksetha Sahana Sewa in Kandy in May, June or July 2017		30/362 (8.3)	6.5 (4.4, 8.7)
Escorted to an STI clinic by the staff of the NGO Laksetha Sahana Sewa in Kandy in May, June or July 2017		20/362 (5.5)	4.2 (2.4, 6.0)
Received a purse by peer educators (staff of the NGO Laksetha Sahana Sewa in Kandy) in the week of 23 October - 31 October 2017 during their outreach work <sup>1</sup>		59/362 (16.3)	14.6 (10.8, 18.4)
Participated in the first IBBS in Sri Lanka in 2014 <sup>2</sup>	Yes	38/266 (14.3)	12.5 (8.8, 16.1)
	Don't know	23/266 (8.6)	-
	In Colombo	-	-
	In Kandy	38/38 (100)	-
	In Galle	-	-

<sup>1</sup> Due to the fact that two different versions of ODK were used across data collection, one-third of the respondents were asked about 30 Oct - 5 Nov, and the remainder were asked about the correct dates (23-30 Oct). However, it is highly likely that respondents did not remember exact dates, but rather the activity of being given a purse. As such, the discrepancy is noted, albeit unlikely to impact the overall interpretations of the indicator. <sup>2</sup> Question added after fieldwork had started (96 respondents did not provide an answer)

### 3. Summary results

#### 3.2 Men who have sex with men

##### 3.2.1. Colombo

A total of 354 MSM respondents were recruited in Colombo, including 6 seeds. For estimates, Gile's SS with population size estimate of 3,991 was used along with 0.95 confidence intervals, and 5,000 bootstraps. Across the tables presented below, because estimates based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

##### Homophily and Convergence

As mentioned in the previous sections, a homophily value of one means no homophily, while values above show the presence of positive homophily (e.g. people are recruiting similar to themselves), and values below 1 mean negative homophily (e.g. people are recruiting different from themselves). Amongst MSMs in Colombo, the homophily ranged from 0.73 to 1.29, overall this can be interpreted as weak homophily. For five out of seven key indicators, population estimates became stable around the 250<sup>th</sup> participant or earlier during sampling. For the indicators of income and coverage of HIV prevention programmes, populations estimates started to become stable somewhat later during sampling. Given that the sample size has been reached and these indicators started to converge around the 300<sup>th</sup> participant, this does not have an impact on the results interpretation.

**Table 97: Homophily analysis**

	<i>Target indicator</i>	<i>Recruitment homophily</i>	<i>Estimated population homophily</i>
1	HIV prevalence among MSM <sup>1</sup> (% HIV positive)	-	-
2	Active syphilis among MSM <sup>1</sup>	-	-
3	Viral hepatitis among MSM (HBV) <sup>1</sup>	-	-
4	HIV and hepatitis co-infection among MSM <sup>2</sup>	-	-
5	Knowledge of HIV status among MSM <sup>3</sup> (% Know HIV status from an HIV test)	1.09	1.05
6	Coverage of HIV prevention programs among MSM <sup>4</sup> (% Reached with HIV/AIDS prevention programs)	1.09*	1.14
7	Condom use among MSM (% Used a condom the last time they had anal sex with a male partner)	0.96*	0.97
8	Discriminatory attitudes towards PLHIV <sup>5</sup> (% who answer 'No' to at least one of the two questions)	0.96	0.73
9	Avoidance of HIV services because of stigma and discrimination among MSM <sup>6</sup> (% who answer 'Yes' to at least one of the reasons)	1.29*	1.11
10	Age (% Mdn+)	1.01	1.07
11	Income (% 20,000 Rs.+)	1.07*	1.38

<sup>1</sup> Not calculated because there were too few positive cases. <sup>2</sup> Not calculated because there were not any positive cases. <sup>3</sup> Tested and positive or tested in the past 12 months and negative. <sup>4</sup> Received at least two interventions

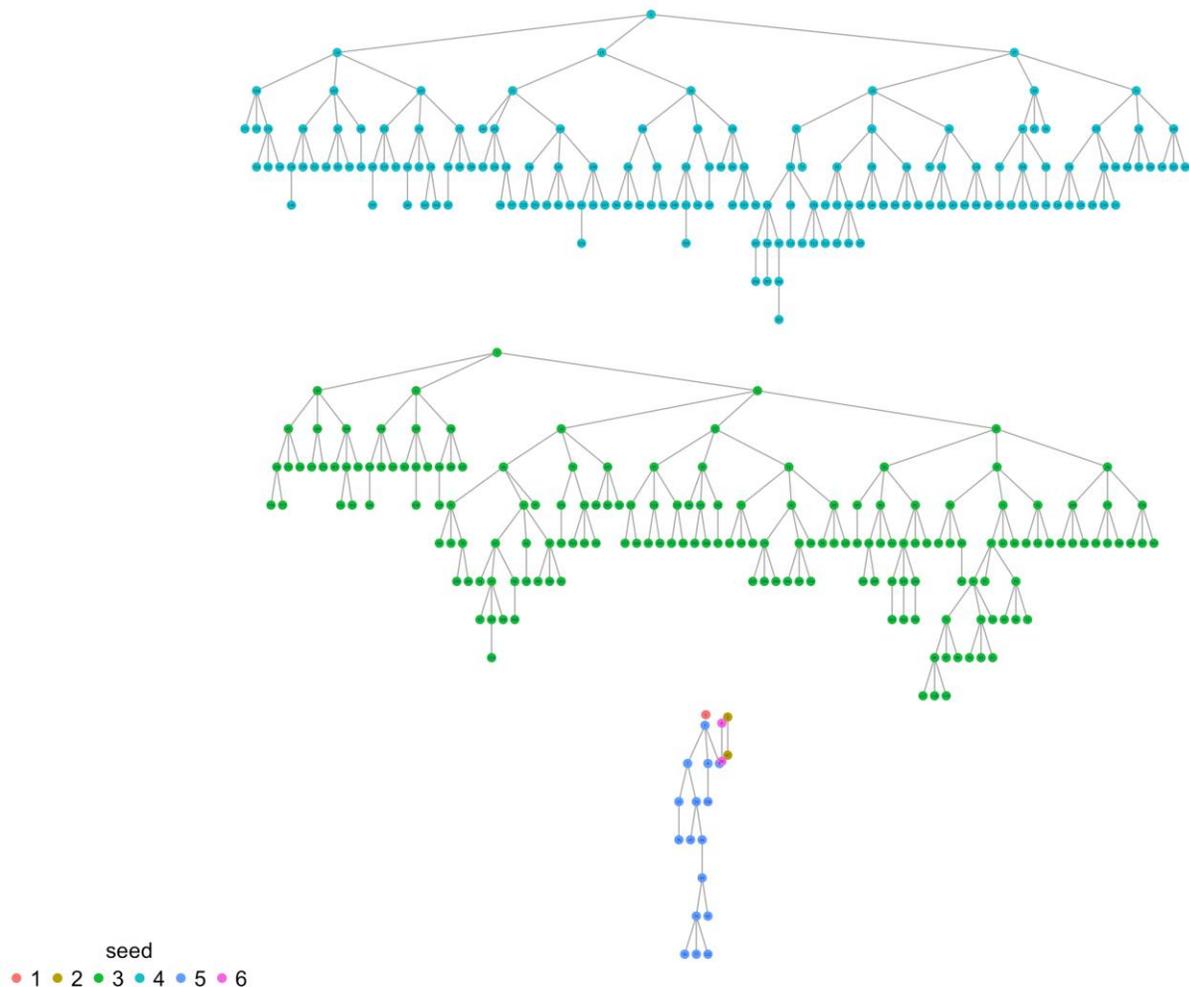
in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Tested for STI).<sup>5</sup> Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?; Do you think that children living with HIV should be able to attend school with children who are HIV negative? <sup>6</sup> Did not seek HIV testing/prevention/treatment services because of: Fear of or concern about stigma by staff or neighbours; Fear of or concern about or experienced violence; Fear of or concern about or experienced police harassment or arrest. This Global AIDS Monitoring indicator has changed. Please see Global AIDS Monitoring 2018, pg. 96.

\*  $p < 0.05$

### Recruitment

Recruitment started with six initial respondents (seeds). Among them, two were almost equally productive, accounting for 48.6% and 45.5% of the total sample. Through the third seed, 4.5% of the total sample was recruited, and through the last three seeds, only five study participants were recruited.

**Figure 10. Recruitment tree – MSM Colombo**



**Table 98: Recruitment information**

Characteristic	Responses	Sample proportion n/N (%)
Main reason for participation	Interest in HIV and sexual health	72/354 (20.3)
	HIV test	150/354 (42.4)
	Interest in issues related to MSM	120/354 (33.9)
	Helping the community	8/354 (2.3)
	Friend wanted me to participate	3/354 (0.8)
	Someone forced me	0/354 (0.0)
	Incentive/Gift	1/354 (0.3)
Mode of receiving the coupon	Received the coupon from a friend/acquaintance	348/354 (98.3)
	Found the coupon laying around somewhere	0/354 (0.0)
	Bought or exchanged it for something	0/354 (0.0)
	Seed (from the IBBS office)	6/354 (1.7)
Acquaintances for:	< 6 months	81/348 (23.3)
	6 months – 1 year	112/348 (32.2)
	> 1 year	155/348 (44.5)
Screener's confidence that participant is MSM	Confident	354/354 (100)
	Somewhat confident	0/354 (0.0)

On average, study participants knew about sixteen other MSM. When asked how many of the MSM they knew who were at least 18 years of age, who lived in Colombo, and who they have seen in the past one month, on average, study participants knew eight other MSM.

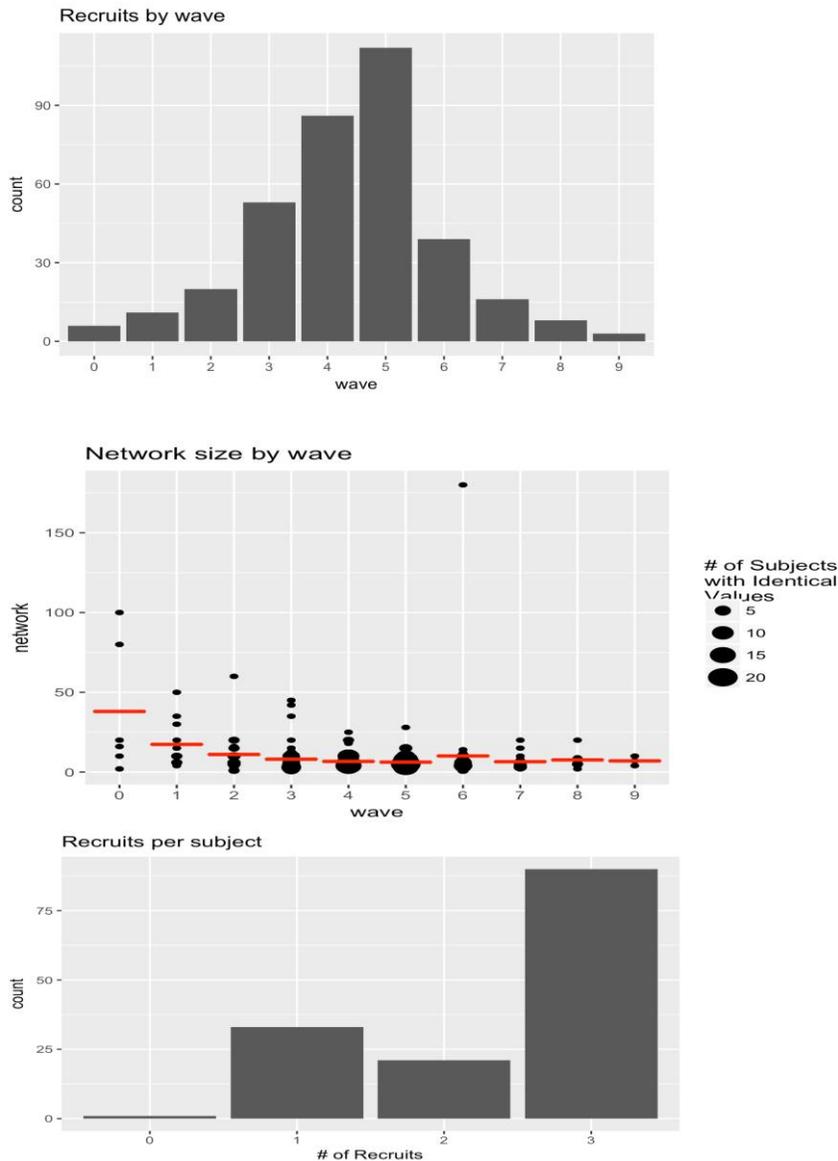
**Table 99: Network size questions**

Characteristic	Sample statistics
How many How many men do you know (they know your name and you know theirs), who have had sex with men in the last 6 months? <sup>1</sup>	<i>M</i> ( <i>SD</i> ) = 15.9 (21.29) Mdn = 11 Range = 1 – 250
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many are above the age of 18? <sup>2</sup>	<i>M</i> ( <i>SD</i> ) = 14.2 (17.74) Mdn = 10 Range = 1 – 225
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many live, work or study in ___ [city of survey]? <sup>3</sup>	<i>M</i> ( <i>SD</i> ) = 11.7 (15.09) Mdn = 10 Range = 1 – 200
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many have you seen in the past 1 month? <sup>4,5</sup>	<i>M</i> ( <i>SD</i> ) = 8.3 (12.88) Mdn = 6 Range = 1 – 180

<sup>1</sup> One respondent did not provide a valid answer to this question. His answer for this question was imputed with the median value of 11. <sup>2</sup> One respondent did not provide a valid answer to this question. His answer for this question was imputed with the median value of 10. <sup>3</sup> One respondent did not provide a valid answer to this question. His answer for this question was imputed with the median value of 10. <sup>4</sup> One respondent did not provide a valid answer to this question. His answer for this question was imputed with the median value of 6. <sup>5</sup> In the estimation of population frequencies and statistics, this question was used as the network size question.

A total of nine waves were reached among MSM in Colombo, with the majority of respondents recruited in waves four and five (24.3 and 31.6%, respectively). With the exception of wave 6, in which due to the outlier, the average network size is slightly higher than in the previous waves, as it is expected, the average network size is lower in subsequent waves, ranging from 38 (Median = 18) in wave zero to eight and seven in the final, eighth and ninth, waves. Overall, recruitment in Colombo went well, with a majority of study participants recruiting in the study three other MSM.

**Figure 11. Recruitment diagnostics – MSM Colombo**



## Biological Indicators

Only two MSM in Colombo tested positive for HIV, resulting in a 0.3% population prevalence, while active syphilis prevalence was 1.4%, and Hepatitis B was 0.5%. No reported cases of HIV, syphilis or Hepatitis B were recorded.

**Table 100: Biological test results**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
3.3 Positive for HIV	See Note below>	2/354 (0.6)	0.3 (0.0, 0.8)
3.12 Positive for syphilis (VDRL)	Reactive	2/354 (0.6)	1.4 (0.0, 3.8)
	Weakly reactive	3/354 (0.8)	0.3 (0.0, 0.7)
Positive for syphilis (TPPA)		14/354 (4.0)	3.8 (0.8, 6.7)
Positive for syphilis (onsite testing)		15/354 (4.2)	3.9 (0.9, 6.9)
3.14 Positive for hepatitis B surface antigen		2/354 (0.6)	0.5 (0.0, 0.9)
3.14 HIV and hepatitis co-infection		0/354 (0.0)	-

*Note: CM46 and CM305 tested positive – CM305 was never before tested and CM46 said his last test was negative. Under the indicator 'last HIV test result', CM61 and CM222 said that their last HIV test result was positive. So basically, they are self-reporting as positive, despite negative test results. Have indicated this as a footnote after the HIV testing table.*

## Socio-Demographic Characteristics

All MSM in Colombo were born in Sri Lanka and have Sri Lankan citizenship. District of residence in the past year has for a majority of them has been Colombo (93.4%).

**Table 101: Citizenship and Residence**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Citizenship	Sri Lankan	354/354 (100)	-
Country of birth	Sri Lanka	354/354 (100)	-
District of residence in the past year	Colombo	353/354 (99.7)	99.7 (99.3, 100)
	Other <sup>1</sup>	1/354 (0.3)	0.3 (0.0, 0.7)
Primary residence is Colombo <sup>1</sup>		327/354 (92.4)	93.4 (90.1, 96.7)

<sup>1</sup> Galle

Mean age of MSM in Colombo is 35.3 years, with close to half (48.1%) being younger than 35 years of age. With regard to ethnicity and language spoken at home, almost all (85.1 and 94.1%, respectively) of MSM in Colombo are Sinhalese. Almost all MSM in Colombo can read and write

(96.6%) and very few have never attended formal education (1.2%). Two-thirds of MSM in Colombo are in paid work (34.0%) or work occasionally (40.3%) and a majority of them earn at least 20,000 Sri Lankan Rupees per month (127 USD).

**Table 102: Core socio-demographic indicators**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age	Sample  <i>M (SD) =</i> 35.0 (11.45) <i>Mdn =</i> 35.0 <i>N =</i> 354 <i>Range =</i> 18 – 75	Pop. est.  <i>M (SD) =</i> 35.3 (11.91) <i>Mdn =</i> 35.0 - -	-	-
Age groups	18 – 24 25 – 34 35 – 44 ≥ 45		79/354 (22.3) 96/354 (27.1) 102/354 (28.8) 77/354 (21.8)	24.4 (18.9, 30.1) 23.7 (19.1, 28.5) 27.5 (21.9, 33.4) 24.3 (18.2, 30.1)
Sex	Man TGW		353/354 (99.7) 1/354 (0.3)	98.6 (96.9, 100.0) 1.3 (0.0, 3.1)
Sex same as at birth			351/354 (99.2)	99.5 (99.0, 100.0)
Ethnicity	Sinhalese Sri Lankan Tamil Indian Tamil Moor/Muslim Burgher Malay		300/354 (84.7) 42/354 (11.9) 6/354 (1.7) 5/354 (1.4) 0/354 (0.0) 1/354 (0.3)	85.1 (81.3, 88.9) 11.0 (7.9, 14.1) 1.3 (0.3, 2.4) 2.5 (0.0, 5.1) - 0.0 (0.0, 0.1)
Languages spoken at home (multiple response)	Sinhalese Tamil English Other		336/354 (94.9) 27/354 (7.6) 1/354 (0.3) 1/354 (0.3)	94.1 (90.9, 97.3) 8.2 (4.5, 11.8) 0.1 (0.0, 0.2) 0.2 (0.0, 0.7)
Can read and write			343/354 (96.9)	96.6 (94.6, 98.6)
Completed level of education	Never attended school Grade 1-5 Grade 6-10 Passed O/L Passed A/L Completed Diploma Completed Degree		5/354 (1.4) 18/354 (5.1) 104/354 (29.4) 154/354 (43.5) 60/354 (16.9) 6/354 (1.7) 7/354 (2.0)	1.2 (0.0, 2.7) 4.7 (2.3, 7.1) 31.5 (25.6, 37.3) 41.8 (35.6, 48.0) 15.7 (11.1, 20.4) 3.7 (0.0, 7.3) 1.4 (0.0, 2.9)
Main activity	In paid work (including parental or other leave) Occasional work In unpaid or voluntary work Unemployed Student Retired		121/351 (34.5) 141/351 (40.2) 42/351 (11.9) 42/351 (11.9) 1/351 (0.3) 1/351 (0.3)	34.0 (27.7, 40.2) 40.3 (34.3, 46.4) 12.9 (8.1, 17.6) 12.1 (7.9, 16.2) 0.3 (0.0, 1.0) 0.1 (0.0, 0.3)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Other	3/351 (0.9)	0.3 (0.0, 0.7)
	Rather not say	3/354 (0.8)	-
Income	< 5,000 Rupees	8/ 351 (2.3)	4.3 (0.8, 7.8)
	5,000-10,000	11/ 351 (3.1)	2.4 (0.9, 3.8)
	10,001-20,000	47/ 351 (13.4)	10.1 (6.9, 13.3)
	20,001-30,000	113/ 351 (32.2)	31.1 (25.7, 36.5)
	30,001-40,000	96/ 351 (27.4)	30.9 (25.2, 36.7)
	> 40,000 Rupees	76/ 351 (21.7)	21.2 (16.1, 26.4)
	Don't know	1/354 (0.3)	-
	Rather not say	2/354 (0.6)	-

Half of MSM in Colombo live in their parents' home (49.1%). On average, MSM in Colombo live with three other people, and about one-third (36.7%) share their household with at least one child. Very few of MSM in Colombo are a parent or a guardian of a child (6.4%). Finally, two-thirds (66.8%) of MSM in Colombo are currently in a relationship. For a majority, their partner is a man (85.5%).

**Table 103: Household information and family life**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of residence	Temporary shelter	34/354 (9.6)	8.9 (5.6, 12.3)
	Boarding house	57/354 (16.1)	14.2 (10.5, 17.8)
	Parents' home	166/354 (46.9)	49.1 (42.2, 55.8)
	My own home	95/354 (26.8)	27.1 (20.8, 33.5)
	Lodging	1/354 (0.3)	0.3 (0.0, 0.8)
	On the street	1/354 (0.3)	0.5 (0.0, 1.3)
	Brothel	0/354 (0.0)	-
Number of household members	Sample <i>M (SD) =</i> 4.0 (1.55) <i>Mdn =</i> 4.0 <i>N =</i> 338 <i>Range =</i> 1 – 11	Pop. est. <i>M (SD) =</i> 3.9 (1.51) <i>Mdn =</i> 4.0 -	-
Number of children currently living in the household	No children	197/324 (60.8)	63.3 (56.8, 69.6)
	One	58/324 (17.9)	16.1 (11.6, 20.5)
	Two	52/324 (16.0)	16.7 (11.6, 21.8)
	Three or more	17/324 (5.2)	4.0 (2.2, 5.8)
	Don't know	26/354 (7.4)	-
	Rather not say	4/354 (1.1)	-
Number of children	No children	299/324 (92.3)	93.6 (90.7, 96.5)
	One	10/324 (3.1)	2.6 (0.8, 4.4)
	Two	10/324 (3.1)	2.4 (0.8, 4.0)
	Three or more	5/324 (1.5)	1.4 (0.2, 2.6)
	Don't know	27/354 (7.6)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Rather not say	3/354 (0.8)	-
Marital status	Single (Never married)	293/352 (83.2)	82.4 (77.4, 87.4)
	Married	36/352 (10.2)	10.6 (6.5, 14.7)
	Divorced/Separated	21/352 (6.0)	6.1 (2.5, 9.7)
	Widowed	2/352 (0.6)	0.9 (0.0, 2.1)
	Rather not say	2/354 (0.6)	-
Cohabitation	Living together with a partner/spouse	42/349 (12.0)	13.1 (8.1, 17.9)
	Involved in a relationship without living together	186/349 (53.3)	53.7 (47.4, 60.1)
	Have no relationship/Do not have a partner	121/349 (34.7)	33.2 (27.8, 38.8)
	Rather not say	5/354 (1.4)	-
Sex of partner	Woman	26/228 (11.4)	14.2 (7.8, 20.6)
	Man	202/228 (88.6)	85.8 (79.4, 92.2)
Self-identifies as: (multiple response)	MSM (gay man)	116/354 (32.8)	36.3 (30.2, 42.4)
	Nachchi	73/354 (20.6)	17.9 (13.9, 22.1)
	Male sex worker	172/354 (48.6)	47.9 (41.2, 54.5)
	Transgender woman	1/354 (0.3)	0.2 (0.0, 0.6)
	Other MSM	0/354 (0.0)	-

## HIV/AIDS

About one in four MSM in Colombo has never heard of HIV/AIDS (26.7%). Among those who have, close to half (41.5%) have received the most thorough information about HIV/AIDS from NGOs. Among MSM in Colombo who have heard of HIV/AIDS, over half (54.3%) have never discussed HIV/AIDS with any of their partners. Finally, as many as one-quarter (25.0%) of MSM in Colombo know somebody who is HIV-positive or has died of AIDS.

**Table 104: General knowledge about HIV/AIDS**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has heard of HIV/AIDS	Yes	254/349 (72.8)	73.3 (67.7, 78.9)
	Don't know	5/354 (1.4)	-
Main source of the most thorough understanding of HIV/AIDS	School	24/254 (9.4)	9.3 (4.5, 14.1)
	Health services	32/254 (12.6)	11.8 (6.3, 17.3)
	Workplace	4/254 (1.6)	1.9 (0.0, 3.9)
	Friends/Family	14/254 (5.5)	5.3 (2.1, 8.4)
	Television	12/254 (4.7)	4.7 (1.6, 7.9)
	Newspaper/Magazines	17/254 (6.7)	7.7 (3.8, 11.5)
	Posters/Billboards	25/254 (9.8)	10.2 (5.5, 14.8)
	Pamphlets/Leaflets	11/254 (4.3)	5.9 (1.3, 10.5)
	Radio	1/254 (0.4)	1.8 (0.2, 3.5)
	NGOs	114/254 (44.9)	41.5 (34.6, 48.2)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Discussed HIV with any sexual partner	Yes, all	28/254 (11.0)	9.8 (5.6, 14.1)
	Yes, some	100/254 (39.4)	35.4 (28.6, 42.2)
	No, none	124/254 (48.8)	54.3 (46.3, 62.3)
	Don't Know	2/254 (0.8)	0.4 (0.0, 1.1)
Partner ever disclosed their HIV status	Yes, all	23/128 (17.9)	17.8 (9.1, 26.5)
	Yes, some	100/128 (78.1)	79.2 (70.2, 88.3)
	No, none	4/128 (3.1)	2.7 (0.0, 6.3)
	Don't Know	1/128 (0.8)	0.3 (0.0, 0.5)
Knows somebody who is HIV-positive or has died of AIDS		68/254 (26.8)	25.0 (18.6, 31.3)
Close friend or relative died of AIDS	Yes, close relative	1/254 (0.4)	0.2 (0.0, 0.6)
	Yes, close friend	24/254 (9.4)	8.5 (4.7, 12.3)
	Yes, close relative and close friend	1/254 (0.4)	0.3 (0.0, 0.9)
	No	221/254 (87.0)	88.1 (83.6, 92.6)
	Don't Know	7/254 (2.8)	2.9 (0.6, 5.1)

About one in three (39.9%) MSM in Colombo cannot gauge their personal risk of HIV. Among the one-third (28.6%) who believe their risk is none or low, most think so because they always use condoms (65.6%). Among the final one-third (30.6%) of MSM in Colombo who perceive their risk of HIV as moderate or high, most believe so because they have had many sexual partners (77.9%).

**Table 105: Perception of personal HIV risk**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Personal HIV risk	No risk	84/353 (23.8)	22.0 (17.3, 26.7)
	Low risk	25/353 (7.1)	7.6 (3.9, 11.4)
	Moderate risk	32/353 (9.1)	7.4 (4.6, 10.1)
	High risk	86/353 (24.4)	23.2 (18.0, 28.3)
	Don't know	126/353 (35.7)	39.9 (34.0, 45.8)
	Rather not say	1/354 (0.3)	-
Reasons for perceiving the risk as moderate or high (multiple response)	Many sexual partners	91/118 (77.1)	77.9 (69.0, 87.1)
	Didn't always use condoms	13/118 (11.0)	7.2 (2.6, 12.0)
	Injected drugs	0/118 (0.0)	-
	Partner has other partners	22/118 (18.6)	19.3 (10.5, 28.5)
	Don't know	2/118 (1.7)	1.1 (0.0, 2.8)
Reasons for perceiving no or low risk (multiple response)	Trust my partner/s	51/109 (46.8)	40.0 (29.7, 50.1)
	Always use condoms	71/109 (65.1)	65.6 (55.4, 76.1)

Knowledge about HIV prevention is somewhat low amongst MSM in Colombo, with only one in five (19.5%) being able to correctly identify modes of sexual transmission of HIV and reject major misconceptions about transmission HIV. When looking at specific items that that the composite

indicator consists of, a majority of MSM in Colombo know that the risk of getting HIV can be reduced by using a condom every time one has sex (63.8%) and that a healthy-looking person can have HIV (63.6%). Much fewer also know that a person cannot get HIV by sharing food with someone who is infected (30.3%).

**Table 106: GAM 5.1 Knowledge about HIV prevention, disaggregated by age**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners	<u>Among all</u> Yes	200/349 (57.3)	58.8 (54.4, 63.2)
	<u>Among those aged 18 – 24</u> Yes	42/77 (54.5)	55.6 (43.7, 67.3)
Person can reduce the risk of getting HIV by using a condom every time he/she has sex	<u>Among all</u> Yes	215/349 (61.6)	63.8 (59.8, 67.9)
	<u>Among those aged 18 – 24</u> Yes	46/77 (59.7)	62.9 (51.2, 74.9)
Healthy-looking person can have HIV	<u>Among all</u> Yes	214/349 (61.3)	63.6 (59.6, 67.7)
	<u>Among those aged 18 – 24</u> Yes	48/77 (62.3)	67.3 (55.1, 79.7)
Person cannot get HIV from mosquito bites	Among all No	197/349 (56.4)	58.7 (54.3, 63.1)
	<u>Among those aged 18 – 24</u> No	46/77 (59.7)	65.1 (53.4, 77.4)
Person cannot get HIV by sharing food with someone who is infected	<u>Among all</u> No	119/348 (34.2)	30.3 (24.9, 35.6)
	<u>Among those aged 18 – 24</u> No	23/77 (29.9)	27.6 (19.3, 35.8)
Composite indicator for knowledge about HIV prevention (1-5 <sup>1</sup> )	<u>Among all</u> # of correct answers		
	None	102/349 (29.2)	28.3 (22.7, 33.9)
	One	14/349 (4.0)	4.0 (1.8, 6.2)
	Two	17/349 (4.9)	4.0 (2.0, 6.1)
	Three	40/349 (11.5)	11.2 (7.4, 15.0)
	Four	103/349 (29.5)	33.0 (26.5, 39.6)
	Five	73/349 (20.9)	19.5 (14.3, 24.6)
	<u>Among those aged 18 - 24</u> # of correct answers		
	None	21/77 (27.3)	23.6 (6.7, 40.0)
	One	5/77 (6.5)	6.6 (0.0, 13.6)
	Two	5/77 (6.5)	7.5 (0.0, 17.4)
	Three	8/77 (10.4)	7.2 (0.0, 16.4)
Four	24/77 (31.2)	40.6 (15.4, 66.4)	
Five	14/77 (18.2)	14.5 (0.7, 28.2)	

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)		
HIV can be transmitted from mother to her unborn child	Yes	263/354 (74.3)	75.7	70.1	81.2
	No	67/354 (18.9)	17.5	12.7	22.3
	Don't know	24/354 (6.8)	6.8	3.4	10.1
Ever heard of ART	Yes	248/354 (70.1)	70.9	65.3	76.5
	No	91/354 (25.7)	24.2	19.0	29.4
	Don't know	15/354 (4.2)	4.9	1.8	7.9

<sup>1</sup> Don't know is recorded as incorrect. Numerator for individual and the composite indicator excludes those who have never heard of HIV/AIDS, while all who had a valid answer to the question regarding whether they had ever heard of HIV/AIDS are included in the denominator.

Among MSM in Colombo who have ever heard of HIV/AIDS, one in three (29.8%) exhibits a discriminatory attitude towards PLHIV, with somewhat more saying that they would not buy fresh vegetables from a shopkeeper or vendor if she knew that this person had HIV (25.7%) than saying that they think children living with HIV should not be able to attend school with children who are HIV negative (16.5%).

**Table 107: GAM 4.1 Discriminatory attitudes towards PLHIV, disaggregated by age**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)		
Thinks that children living with HIV should be able to attend school with children who are HIV negative	<u>Among all</u>				
	Yes	204/252 (81.0)	83.5	(78.3, 88.7)	
	No	48/252 (19.0)	16.5	(11.3, 21.7)	
	Don't Know/Not sure/It depends	2/254 (0.8)			-
	<u>Among those aged 18-49</u>				
	Yes	191/233 (82.0)	83.5	(77.9, 89.0)	
	No	42/233 (18.0)	16.6	(11.0, 22.1)	
	Don't know/Not sure/It depends	1/234 (0.4)			-
	<u>Among those aged 25-49 years</u>				
Yes	146/176 (83.0)	84.6	(78.9, 90.4)		
No	30/176 (17.0)	15.4	(9.6, 21.1)		
Don't know/Not sure/It depends	1/177 (0.6)			-	
Would buy fresh vegetables from a shopkeeper or vendor if he/she knew that this person had HIV?	<u>Among all</u>				
	Yes	179/250 (71.6)	74.2	(68.3, 80.1)	
	No	71/250 (28.4)	25.7	(19.9, 31.8)	
	Don't Know/Not sure/It depends	4/254 (1.6)			-
	<u>Among those aged 18-49</u>				
	Yes	170/232 (73.3)	74.9	(68.7, 81.1)	
	No	62/232 (26.7)	25.1	(19.0, 31.3)	
	Don't know/Not sure/It depends	2/234 (0.9)			-
	<u>Among those aged 25-49 years</u>				
Yes	129/175 (73.7)	75.4	(68.6, 82.3)		
No	46/175 (26.3)	24.6	(17.7, 31.4)		
Don't know/Not sure/It depends	2/177 (1.1)			-	

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Composite indicator for discriminatory attitudes towards PLHIV (1-2 <sup>1</sup> )	Responded 'No' to either of the two questions		
	<u>Among all</u>	83/254 (32.7)	29.8 (23.7, 35.8)
	<u>Among those aged 18-49</u>	72/234 (30.8)	29.2 (22.3, 35.9)
	<u>Among those aged 25-49</u>	53/177 (29.9)	28.2 (20.8, 35.6)

<sup>1</sup> Participants who responded don't know/not sure/it depends and those who refused to answer were excluded from the analysis. Numerator: Number of respondents who respond no to either of the two questions; Denominator: Number of all respondents who have heard of HIV.

Over two-thirds (73.8%) of MSM in Colombo know where to receive an HIV test, with a majority (90.3%) mentioning government STI clinic as a place that they know offers an HIV test. As many as 61.3% of MSM in Colombo have ever tested for HIV, and close to half (47.2%) have received an HIV test within 12 months before the survey was carried out. Among those who ever did receive an HIV test, almost all (89.9%) have received their last HIV test at a government non-STI clinic.

**Table 108: HIV testing**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Knows where to receive an HIV test		260/354 (73.4)	73.8 (68.3, 79.3)
Places that offer HIV testing (multiple response)	Government clinic – STI	238/260 (91.5)	90.3 (85.8, 94.8)
	Government clinic – non-STI	12/260 (4.6)	1.7 (0.7, 2.8)
	Private clinic	34/260 (13.1)	13.3 (8.7, 17.6)
	Private pharmacy or chemist	2/260 (0.8)	0.3 (0.0, 0.6)
	Traditional healer/herbalist	1/260 (0.4)	0.1 (0.0, 0.1)
	Don't know	2/260 (0.8)	0.7 (0.0, 1.5)
Knows HIV status from an HIV test	No, I have never been tested	127/348 (36.5)	38.7 (32.4, 45.0)
	Yes, I have been tested	221/348 (63.5)	61.3 (55.0, 67.6)
	Rather not say	6/354 (1.7)	-
Last HIV test	< 6 months	80/221 (36.2)	31.4 (23.2, 39.5)
	6 – 12 months	90/221 (40.7)	46.3 (37.7, 55.1)
	> 12 Months	51/221 (23.1)	22.3 (14.5, 30.1)
Result of last HIV test <sup>2</sup>	Negative	215/221 (97.3)	98.1 (96.5, 99.6)
	Positive	2/221 (0.9)	0.6 (0, 1.2)
	Indeterminate	0/221 (0.0)	-
	Didn't receive the result	3/221 (1.4)	1.1 (0, 2.5)
	Don't know	1/221 (0.5)	0.2 (0, 0.6)
3.4 Composite indicator for knowledge of HIV status <sup>1</sup> (1-3)	Yes	169/348 (51.4)	47.2 (40.7, 53.7)
Last HIV test was voluntary	Yes	212/220 (96.4)	96.8 (94.6, 98.9)
	Don't know	1/221 (0.3)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Place where last HIV test was received	Government clinic – STI	201/221 (90.9)	89.9 (85.8, 93.9)
	Government clinic – non-STI	4/221 (1.8)	1.5 (0.0, 3.0)
	Private clinic	15/221 (6.8)	8.2 (4.2, 12.2)
	Private pharmacy or chemist	1/221 (0.5)	0.5 (0.3, 0.6)
	Traditional healer/herbalist	0/221 (0.0)	-

<sup>1</sup> Numerator: Number of respondents who tested HIV-positive or who tested in the past 12 months and the result was negative; Denominator: Number of respondents who provided a valid answer to the question about their knowledge about their HIV status from an HIV test.

<sup>2</sup> Two respondents indicated in this question that their last HIV test results were positive; however, the biological results did not show the same result.

Among MSM in Colombo who have never received an HIV test, a majority said it was because they either do not know where to go (39.1%) or because the testing location is inconvenient (23.0%). About one in three (33.1%) of MSM in Colombo avoid HIV services because of stigma and discrimination, namely due to fear or concern about or experienced violence (20.3%).

**Table 109: Reasons for never receiving an HIV test**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Reasons for never receiving an HIV test (multiple response) <sup>1</sup>	Don't know where to go	51/121 (42.1)	39.1 (27.9, 50.5)
	I always use condoms	14/121 (11.6)	10.2 (3.9, 16.5)
	Not at risk of getting HIV	11/121 (9.1)	10.5 (4.6, 16.4)
	Didn't have time/Too busy	9/121 (7.4)	8.0 (2.7, 13.3)
	I trust my partner	12/121 (9.9)	14.6 (5.1, 23.7)
	Afraid of knowing I may be HIV-positive	14/121 (11.6)	12.0 (4.6, 19.4)
	Lack of confidentiality	13/121 (10.7)	9.7 (4.7, 14.9)
	Inconvenient testing location	28/121 (23.1)	23.0 (13.4, 32.8)
	No money	3/121 (2.5)	2.9 (0.0, 7.1)
	Don't know	9/121 (7.4)	5.9 (1.9, 10.0)
Never receiving an HIV test because of stigma and discrimination (multiple response) <sup>1</sup>	Fear or concern about stigma by staff or neighbours	26/121 (21.5)	20.3 (12.4, 28.2)
	Fear of or concern about or experienced violence	9/121 (7.4)	7.3 (1.4, 13.1)
	Fear of or concern about or experienced police harassment or arrest	8/121 (6.6)	6.2 (2.0, 10.1)
Composite indicator for avoidance of HIV services because of stigma and discrimination (1-3) <sup>1</sup>		42/121 (34.7)	33.1 (22.6, 43.6)

<sup>1</sup> Due to a routing error, six respondents did not provide an answer to this question.

## Sexual Behaviour

About one in three MSM in Colombo has ever had sex with a woman (34.7%). At first anal sex with a man, MSM in Colombo were on average 17 years of age. Their first male partner was on average somewhat older, at 22 years of age. Finally, two in three (67.9%) MSM in Colombo visit outdoor sites (such as parks, streets, bus stations, etc.) to find partners.

**Table 110: General sexual history**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had sex with a woman (vaginal or anal intercourse)	Yes		112/351 (31.9)	34.7 (28.3, 41.4)
	Don't know		2/354 (0.6)	-
	Rather not say		1/354 (0.3)	-
Age at first anal sex with a man <sup>1</sup>	Sample	Pop. est.	-	-
	<i>M (SD) =</i> 16.6 (3.71) Mdn = 16.0 <i>N</i> = 353 Range = 8 – 40	<i>M (SD) =</i> 16.8 (3.56) Mdn = 16.0 -		
	< 18		243/353 (68.8)	66.6 (60.6, 72.8)
Age of partner at first anal sex with a man <sup>1</sup>	Sample	Pop. est.	-	-
	<i>M (SD) =</i> 21.6 (5.88) Mdn = 20.0 <i>N</i> = 353 Range = 9 – 45	<i>M (SD) =</i> 21.9 (6.02) Mdn = 20.0		
Visits outdoor sites (such as parks, streets, bus stations, etc.) to find partners			255/354 (72.0)	67.9 (62.1, 73.7)

<sup>1</sup> One study participant answered with zero. His answer was excluded from the analysis.

In the seven days before the survey, MSM in Colombo on average had five sexual partners, with only very few (6.1%) not having any sexual partners during this period.

**Table 111. Sexual partners in the past 7 days**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of all sexual partners	Sample	Pop. est.	-	-
	<i>M (SD) =</i> 5.2 (5.19) Mdn = 4.0 <i>N</i> = 354 Range = 0 – 60	<i>M (SD) =</i> 4.6 (4.01) Mdn = 3.0 -		
	0		15/354 (4.2)	6.1 (2.6, 9.7)

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
	1		27/354 (7.6)	11.6 (6.5, 16.8)
	2 or more		312/354 (88.1)	82.3 (76.2, 88.3)
Number of casual <sup>1</sup> sexual partners (among those who had at least one sexual partner)	Sample <i>M (SD)</i> = 3.8 (3.35) Mdn = 3.0 <i>N</i> = 339 Range = 0 – 23	Pop. est. <i>M (SD)</i> = 3.4 (2.97) Mdn = 2.0 - -	-	-
	0		28/339 (8.3)	11.9 (6.9, 16.9)
	1		47/339 (13.9)	13.7 (9.4, 18.0)
	2 or more		264/339 (77.9)	74.4 (68.1, 80.6)
Number of regular <sup>2</sup> sexual partners (among those who had at least one sexual partner)	Sample <i>M (SD)</i> = 1.6 (3.11) Mdn = 1.0 <i>N</i> = 339 Range = 0 – 50	Pop. est. <i>M (SD)</i> = 1.4 (1.69) Mdn = 1.0 - -	-	-
	0		87/339 (25.7)	25.6 (20.2, 31.1)
	1		128/339 (37.8)	37.2 (31.6, 42.8)
	2 or more		124/339 (36.6)	37.2 (31.3, 43.1)

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis

In the six months preceding the survey, MSM in Colombo on average had 16 sexual partners, with as many as 84.4% having had five or more sexual partners. With regard to type of relationship, MSM in Colombo on average had three times as many casual (12) than regular (four) sexual partners. Finally, at last anal sex, a majority (83.8%) of MSM in Colombo used a condom.

**Table 112: Sexual partners in the past 6 months**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of all sexual partners	Sample <i>M (SD)</i> = 17.2 (12.87) Mdn = 15.0 <i>N</i> = 354 Range = 1 – 150	Pop. est. <i>M (SD)</i> = 15.9 (10.79) Mdn = 15.0 - -	-	-
	1 – 2		21/354 (5.9)	7.9 (3.4, 12.5)
	3 – 4		21/354 (5.9)	7.6 (3.9, 11.4)
	5 or more		312/354 (88.1)	84.4 (78.3, 90.4)

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of casual <sup>1</sup> sexual partners	Sample <i>M (SD)</i> = 12.5 (8.80) Mdn = 12.0 <i>N</i> = 354 Range = 0 – 12	Pop. est. <i>M (SD)</i> = 11.7 (8.5) Mdn = 11.5 - -	-	-
	0		20/354 (5.6)	6.4 (3.2, 9.5)
	1		17/354 (4.8)	7.5 (2.8, 12.1)
	2		17/354 (4.8)	6.8 (2.7, 10.8)
	3 or more		300/354 (84.7)	79.3 (73.2, 85.6)
Number of regular <sup>2</sup> sexual partners	Sample <i>M (SD)</i> = 4.7 (8.03) Mdn = 3.0 <i>N</i> = 354 Range = 0 – 130	Pop. est. <i>M (SD)</i> = 4.23 (4.52) Mdn = 3.0 - -	-	-
	0		61/354 (17.2)	17.2 (11.9, 22.4)
	1		47/354 (13.3)	11.6 (8.1, 15.2)
	2		40/354 (11.3)	11.3 (7.4, 15.3)
	3 or more		206/354 (58.2)	59.8 (53.3, 66.5)
3.6 Condom use among MSM			303/354 (85.6)	83.8 (79.2, 88.5)

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis

A majority (81.1%) of MSM in Colombo had ever received money, goods or services in exchange for sex. Among them, most (97.5%) have received money, goods or services in exchange for sex in the past 12 months, with their last paying partner, in most cases (97.1%), being a man. Over half (66.4%) of MSM in Colombo have ever given money, goods or services in exchange for sex and among them, 94.7% had given money, goods or services in exchange for sex in the past 12 months, with their last partner, in most cases (98.4%) being a man. Condom use at transactional sex was high; 88.8% of used a condom at last sex they were paid for, and 91.2% used a condom at last sex they paid for.

**Table 113: Transactional sex**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever received money, goods or services in exchange for sex	Refer to Note below	303/354 (85.6)	81.8 (76.3, 87.2)
Received money, goods or services in exchange for sex in the past 12 months		298/303 (98.3)	97.5 (94.3, 100.0)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Received money, goods or services in exchange for <u>anal sex with a man</u> in the past 12 months	Yes Don't know	294/297 (99.0) 1/298 (0.3)	99.3 (98.5, 100.0) -
Sex of partner at last sex for which money was received	Female Male Rather not say	14/300 (4.7) 286/300 (95.3) 3/303 (0.8)	2.9 (1.2, 4.7) 97.1 (95.3, 98.8) -
Used a condom at last sex for which money was received	Yes Rather not say	263/302 (87.1) 1/303 (0.3)	88.8 (84.5, 93.0) -
Ever given money, goods or services in exchange for sex	Yes	245/354 (69.2)	66.4 (60.5, 72.5)
Gave money, goods or services in exchange for sex with in the past 12 months	Yes	231/245 (94.3)	94.7 (92.2, 97.3)
Sex of partner at last sex for which money was given	Female Male	6/245 (2.4) 239/245 (97.6)	1.6 (0.2, 3.0) 98.4 (97.0, 99.8)
Used a condom at last sex for which money, goods or services were given		219/245 (89.4)	91.2 (87.3, 95.2)

*\*It is expected that this question was misinterpreted, due to this exceptionally high frequency of transactional sex recorded.*

Almost all (93.7%) MSM in Colombo had a casual male sexual partner in the six months before the survey. Among them, most have used a condom consistently (40.3%) or almost every time (37.5%) in the past six months, with 82.2% having had used a condom at last anal sex with a casual partner. Those who have not used a condom at last anal sex with a casual sexual partner in most cases did so because a condom was not available (46.6) or because they did not think a condom was necessary (23.6%). Finally, close to one in four (22.8%) MSM in Anuradhapura did not know or ask their last casual male sexual partner about his HIV status.

**Table 114: Casual Male Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Had a casual partner in the past 6 months <sup>1</sup>		334/354 (94.4)	93.7 (90.6, 96.7)
Frequency of condom use in the past 6 months	Every time Almost every time Sometimes Never	139/334 (41.6) 127/334 (38.0) 59/334 (17.7) 9/334 (2.7)	40.3 (34.2, 46.5) 37.5 (31.5, 43.6) 19.6 (14.3, 24.9) 2.6 (0.7, 4.4)
Condom use at last anal sex with a casual partner	Yes No Don't remember	273/330 (82.7) 57/330 (17.3) 2/334 (0.6)	82.2 (77.0, 87.3) 17.9 (12.5, 23.2) -

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Rather not say	2/334 (0.6)	-
Reasons for not using a condom (multiple answers)	Never heard of condoms	2/57 (3.5)	2.9 (0.0, 6.9)
	Don't know how to obtain a condom	1/57 (1.8)	1.4 (0.0, 3.8)
	I didn't think it was necessary	13/57 (22.8)	23.6 (10.2, 37.6)
	I didn't think of it	8/57 (14.0)	13.4 (5.0, 21.9)
	Not available	29/57 (50.9)	46.6 (31.9, 60.8)
	Too expensive	1/57 (1.8)	1.0 (0.0, 2.4)
	Partner objected	7/57 (12.3)	17.8 (5.6, 29.9)
	Don't like them	4/57 (7.0)	6.3 (0.6, 12.0)
	Condoms takes away pleasure	7/57 (12.3)	13.5 (3.5, 24.0)
	Don't know	4/57 (7.0)	5.3 (0.0, 11.4)
HIV status of the last casual partner	HIV negative	254/333 (76.3)	77.2 (72.2, 82.2)
	HIV positive	0/333 (0.0)	-
	Did not know / ask	79/333 (23.7)	22.8 (17.8, 27.8)
	Rather not say	1/334 (0.3)	-

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis

A majority (89.2%) of MSM in Colombo had a regular male sexual partner in the six months before the survey, and most (52.2%) have met their last regular male sexual partner in a public place, such as in a street, park or in public transport. Among MSM in Colombo who had a regular sexual partner in the past six months, only about one in three (32.2%) has used a condom consistently during sex, although as many as three in four (74.1%) having had used a condom at last anal sex with a regular partner. Those who have not used a condom at last anal sex with a regular sexual partner in most cases did so because a condom was not available (41.8%) or because they did not think a condom was necessary (30.3%). Finally, as many as one in four (24.1%) MSM in Colombo did not know or ask their last regular male sexual partner about his HIV status.

**Table 115: Regular Male Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Had a regular partner in the past 6 months <sup>1</sup>		293/354 (82.8)	82.9 (78.1, 87.7)
Frequency of condom use in the past 6 months	Every time	100/292 (34.2)	32.2 (26.1, 38.3)
	Almost every time	41/292 (14.0)	13.8 (8.2, 19.5)
	Sometimes	130/292 (44.5)	46.3 (39.4, 53.1)
	Never	21/292 (7.2)	7.8 (4.2, 11.2)
Condom use at last anal sex with a regular partner	Yes	217/292 (74.3)	74.1 (68.1, 80.1)
	No	75/292 (25.7)	25.9 (20.2, 31.7)
	Rather not say	1/292 (0.3)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Reasons for not using a condom (multiple answers)	Never heard of condoms	1/75 (1.3)	0.7 (0.0, 1.8)
	Don't know how to obtain a condom	1/75 (1.3)	1.1 (0.0, 2.9)
	I didn't think it was necessary	18/75 (24.0)	30.3 (15.7, 45.6)
	I didn't think of it	16/75 (21.3)	21.2 (9.5, 33.3)
	Not available	35/75 (46.7)	41.8 (29.8, 53.3)
	Too expensive	0/75 (0.0)	-
	Partner objected	14/75 (18.7)	21.5 (11.4, 31.8)
	Don't like them	8/75 (10.7)	9.3 (3.8, 14.9)
	Condoms takes away pleasure	11/75 (14.7)	17.0 (7.1, 27.0)
Don't know	4/75 (4.0)	4.0 (0.0, 8.6)	
How last regular partner was met <sup>2</sup>	Brothel	1/274 (0.4)	0.4 (0.0, 1.1)
	Bar, café, disco or restaurant	13/274 (4.7)	6.8 (2.3, 11.4)
	Hotel	14/274 (5.1)	3.7 (1.8, 5.6)
	Street, park or public transport	146/274 (53.3)	52.2 (45.5, 59.1)
	Through friends	35/274 (12.8)	13.0 (8.9, 17.1)
	Internet (e.g. Facebook), chat, or SMS	29/274 (10.6)	10.9 (6.8, 14.9)
	Motel or Guest House	0/274 (0.0)	-
	School	2/274 (0.7)	1.0 (0.0, 2.6)
	Party	4/274 (1.5)	2.3 (0.1, 4.5)
	Intermediary	2/274 (0.7)	0.6 (0.0, 1.8)
	Service station	0/274 (0.0)	-
	Truck stop	0/274 (0.0)	-
	Massage Parlour / Spa	0/274 (0.0)	-
	Rather not say	1/275 (0.4)	-
HIV status of the last regular partner	HIV negative	215/293 (73.4)	75.9 (71.3, 80.8)
	HIV positive	-	-
	Did not know / ask	78/293 (26.6)	24.1 (19.3, 28.7)

<sup>1</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis; <sup>2</sup> Due to a skip error, 18 respondents did not provide an answer to this question.

Slightly over one-third (34.7%) of MSM in Colombo had ever had sex with a woman. Among them, a majority have had a female sexual partner in the year before the survey (67.3%), with about two-thirds (67.4%) of them also having had a regular female sexual partner. Only one in three (31.1%) MSM in Colombo has consistently used a condom with female sexual partners in the year before the survey, although much more of them (61.0%) have used a condom at last sex with a female sexual partner in the year preceding the survey.

**Table 116: Female Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had sex with a woman (vaginal or anal intercourse)		112/351 (31.9)	34.7 (28.3, 41.4)
Had a female sexual partner in the past 12 months		72/112 (64.3)	67.3 (57.1, 77.4)
Had vaginal sex with a female sex worker in the past 12 months	Refer to Note Below	55/72 (76.4)	80.5 (71.7, 89.6)
Had a regular female sexual partner in the past 12 months		48/72 (66.7)	67.4 (53.6, 80.8)
Frequency of condom use with female sexual partners in the past 12 months	Every time	24/72 (33.3)	31.1 (7.1, 54.9)
	Almost every time	13/72 (18.1)	17.6 (4.9, 30.1)
	Sometimes	31/72 (43.1)	46.8 (10.8, 83.1)
	Never	4/72 (5.6)	4.5 (0.0, 11.1)
Condom use at last sex with a female partner <sup>1</sup>	Yes	56/96 (58.3)	61.0 (49.2, 73.0)
	No	40/96 (41.7)	39.0 (27.0, 50.8)
	Don't remember	1/102 (0.9)	-
	Rather not say	5/102 (4.5)	-
Condom use at last sex with a female sex worker in the past 12 months	Yes	38/53 (71.7)	72.7 (58.0, 87.6)
	No	15/53 (28.3)	27.3 (12.5, 42.0)
	Don't remember	1/54 (1.9)	-
HIV status of the last female partner <sup>1</sup>	HIV-negative	88/98 (89.8)	90.7 (84.1, 97.4)
	HIV-positive	0/98 (0.0)	-
	I did not know / ask	10/98 (10.2)	9.2 (2.6, 15.9)
	Rather not say	4/102 (3.9)	-

<sup>1</sup> Due to a skip error, 10 respondents did not provide an answer to this question.

Note: Sex with a female is exceptionally high, as such the question was either misinterpreted, or the sample was in fact not representative of a true MSM population.

### Use of Condoms and Lubricants

Very few (1.7%) of MSM in Colombo have never heard of condoms. Among those who have, most (98.9%) also know where to obtain condoms. Specifically, MSM in Colombo most often obtain condoms from private pharmacies or chemists (45.7%) or NGOs and outreach services (36.8%), government STD clinics (35.5%) and neighbourhood markets and stands (29.1%). Most MSM in Colombo find condoms to be affordable (67.8%). Three in four MSM in Colombo (71.1%) have ever heard of lubricants and among them, more than half use lubricants always or usually (43.5 and 18.7%, respectively). Most, however, as lubricant use glycerine (34.9%) or baby oil (23.0%).

**Table 117: Use of condoms and lubricants**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of condoms	Yes	346/354 (97.7)	98.3 (97.1, 99.6)
	No	8/354 (2.3)	1.7 (0.4, 2.9)
Knows where to obtain condoms	Yes	342/346 (98.8)	98.9 (97.7, 100.0)
	No	4/346 (1.2)	1.1 (0.0, 2.3)
Usually obtains condoms from: (multiple response)	Government clinic - STD clinic	133/342 (38.9)	35.5 (29.3, 41.8)
	Govt. clinic - Not STD clinic	17/342 (5.0)	2.1 (1.0, 3.3)
	Private clinic	21/342 (6.1)	5.6 (2.8, 8.5)
	Private pharmacy or chemist	161/342 (47.1)	45.7 (39.6, 51.9)
	Traditional healer/herbalist	4/342 (1.2)	0.5 (0.0, 1.0)
	Neighbourhood market/stand	95/342 (27.8)	29.1 (23.3, 35.0)
	Friends	38/342 (11.1)	11.7 (7.5, 15.8)
	Sex partner/s	37/342 (10.8)	10.8 (6.4, 15.2)
	Bar / Nightclub	1/342 (0.3)	0.3 (0.0, 0.7)
	NGOs/ outreach service	122/342 (35.7)	36.8 (30.1, 43.5)
	Service station(s)	2/342 (0.6)	0.2 (0.0, 0.4)
	I do not use condoms	4/342 (1.2)	1.6 (0.0, 3.3)
	Don't know	3/342 (0.9)	1.0 (0.0, 2.1)
Affordability of male condoms	Affordable	229/346 (66.2)	67.8 (61.8, 73.9)
	Somewhat affordable	90/346 (26.0)	24.5 (18.9, 30.1)
	Not affordable	11/346 (3.2)	2.9 (1.1, 4.7)
	Don't know	16/346 (4.6)	4.8 (2.3, 7.4)
Ever heard of lubricants	Yes	258/353 (73.1)	71.1 (65.5, 76.6)
	Don't know	1/354 (0.3)	-
Frequency of lubricant use during vaginal or anal sex	Always	109/257 (42.4)	43.5 (36.5, 50.7)
	Usually	49/257 (19.1)	18.7 (12.9, 24.3)
	Sometimes	71/257 (27.6)	27.5 (21.5, 33.3)
	Rarely	17/257 (6.6)	6.2 (2.5, 9.8)
	Never	11/257 (4.3)	4.3 (1.5, 7.0)
	Don't know	1/258 (0.3)	-
Type of lubricant used (multiple response)	Glycerine	84/246 (34.1)	34.9 (26.9, 42.9)
	Saliva or water	33/246 (13.4)	14.2 (7.9, 20.7)
	Vaseline	37/246 (15.0)	14.8 (8.9, 20.9)
	Baby oil	44/246 (17.9)	23.0 (15.8, 30.0)
	Lotion	30/246 (12.2)	14.1 (8.6, 19.5)
	Other oil	17/246 (6.9)	8.1 (4.2, 12.2)
	Water-based	24/246 (9.8)	9.2 (5.5, 13.1)
	Silicone-based	41/246 (16.7)	13.4 (8.9, 17.8)
	Soap	6/246 (2.4)	3.0 (0.5, 5.5)
	Whatever we get from peer educator(s), don't know what it is	19/246 (7.7)	5.5 (2.7, 8.2)
	Don't know	1/246 (0.4)	0.3 (0.0, 0.7)

## Sexually Transmitted Infections

About three in four (72.9%) MSM in Colombo have ever heard of diseases that can be transmitted sexually. With regard to recognizing and describing symptoms of an STI, most of them know that abdominal pain, burning pain on urination and abnormal genital discharge in women (61.6, 55.1, and 43.5%, respectively) and genital discharge or burning pain on urination in men (59.1 and 53.6%, respectively) indicates a possible sexually transmitted infection. Very few (4.8%) had a symptom of a sexually transmitted infection (i.e., a discharge or genital ulcer (sore)), although as many as 16.8% did receive an STI diagnosis in the year preceding the survey.

**Table 118: Sexually transmitted infections**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of diseases that can be transmitted sexually	Yes	258/351 (73.5)	72.9 (67.1, 78.7)
	Don't know	3/354 (0.8)	-
Can describe symptoms of sexually transmitted infections in women (multiple response)	1. Abdominal pain	146/258 (56.6)	61.6 (54.7, 68.5)
	2. Abnormal genital discharge	112/258 (43.4)	43.5 (35.9, 51.2)
	3. Burning pain on urination	140/258 (54.3)	55.1 (47.8, 62.4)
	4. Genital ulcers or sores	85/258 (32.9)	35.3 (29.0, 41.9)
	5. Swelling in groin area	80/258 (31.0)	32.0 (25.1, 39.0)
	6. Itching	84/258 (32.6)	31.9 (24.7, 39.1)
	Don't know any	24/258 (9.3)	7.0 (3.9, 10.1)
Symptoms mentioned (0-6)	0	24/258 (9.3)	7.0 (3.9, 10.1)
	1	26/258 (10.1)	9.5 (6.2, 12.8)
	2	79/258 (30.6)	30.3 (23.1, 37.4)
	3	66/258 (25.6)	27.5 (20.8, 34.3)
	4	51/258 (19.8)	21.7 (15.4, 27.8)
	5	11/258 (4.3)	3.8 (1.3, 6.2)
	6	1/258 (0.4)	0.2 (0.0, 0.7)
Can describe symptoms of sexually transmitted infections in men (multiple response)	1. Genital discharge	146/258 (56.6)	59.1 (51.8, 66.3)
	2. Burning pain on urination	137/258 (53.1)	53.6 (46.3, 60.9)
	3. Genital ulcers or sores	99/258 (38.4)	39.3 (33.1, 45.5)
	4. Swelling in groin area	104/258 (40.3)	43.2 (36.1, 50.4)
	5. Itching	117/258 (45.3)	42.5 (35.3, 49.5)
	Don't know any	6/258 (2.3)	1.5 (0.2, 2.9)
Symptoms mentioned (0-5)	0	6/258 (2.3)	1.5 (0.2, 2.9)
	1	37/258 (14.3)	12.7 (7.8, 17.6)
	2	98/258 (37.9)	37.8 (31.7, 43.8)
	3	101/258 (39.1)	43.3 (36.1, 50.6)
	4	13/258 (5.0)	4.1 (1.8, 6.4)
	5	3/258 (1.2)	0.6 (0.0, 1.1)
Tested for sexually transmitted diseases in the past 3 months	Yes	126/352 (35.8)	32.3 (26.4, 38.2)
	Don't know	2/354 (0.6)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Received an STI diagnosis in the past 12 months	Yes	47/258 (18.2)	16.8 (11.3, 22.2)
Had a discharge or genital ulcer (sore) in the last 12 months	Yes	17/350 (4.9)	4.8 (2.4, 7.3)
	Don't know	4/354 (1.1)	-
Sought treatment <sup>1</sup>	Yes	16/17 (94.1)	-
Places where treatment was sought (multiple response) <sup>1</sup>	Government clinic - STD clinic	10/17 (58.8)	-
	Govt. clinic - Not STD clinic	0/17 (0.0)	-
	Private clinic	6/17 (35.3)	-
	Private pharmacy or chemist	1/17 (5.9)	-
	Traditional healer/herbalist	0/17 (0.0)	-
	I used medicine or herbs from home	0/17 (0.0)	-
Reasons for seeking treatment from that source (multiple response) <sup>1</sup>	Confidentiality	14/17 (82.4)	-
	Affordability	1/17 (5.9)	-
	Recommended by friend or acquaintance	3/17 (17.6)	-
	Quality and/or specialized care given at this place	2/17 (11.8)	-
	Knows the caregivers	0/17 (0.0)	-
	Known friendliness of the caregivers	0/17 (0.0)	-
	Proximity/location	0/17 (0.0)	-
Reasons for not seeking treatment (multiple response) <sup>1</sup>	Didn't know where to go for treatment	0/1 (0.0)	-
	Embarrassed or afraid to seek treatment	0/1 (0.0)	-
	Could not afford treatment	0/1 (0.0)	-
	Unable to get transportation	0/1 (0.0)	-
	Didn't think I needed it	0/1 (0.0)	-
	Don't know	1/1 (100)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Prevention Programs

Among MSM in Colombo who had ever tested for HIV, a majority (89.0%) have told their counsellor/health care provider that they have sex with men at their last HIV testing. In addition, four in five (80.1%) of them were satisfied or very satisfied with the quality of services provided at the place where they received their last HIV test.

**Table 119: Contact with healthcare providers**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
<b>STI treatment</b>			
Told the healthcare provider that they have sex with men when the last treatment for any symptom of an STI or a diagnosis for an STI was received <sup>1</sup>		16/16 (100)	-
Satisfaction with how the healthcare provider treated them during this last visit <sup>1</sup>	Very satisfied	9/16 (56.3)	-
	Somewhat satisfied	7/16 (43.8)	-
	Not satisfied	0/16 (0.0)	-
<b>HIV testing</b>			
Told the counsellor/health care provider that they have sex with men when last HIV test was received		196/221 (88.7)	89.0 (83.6, 94.4)
Satisfaction with the quality of services provided at the place where the last HIV test was received	Very satisfied	131/219 (59.8)	58.9 (51.8, 65.9)
	Satisfied	45/219 (20.5)	21.2 (13.9, 28.4)
	A little satisfied	40/219 (18.3)	18.6 (13.4, 23.8)
	Not satisfied	3/219 (1.4)	1.4 (0.0, 2.8)
	Rather not say	2/221 (0.9)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported.

In the year preceding the survey, one in three (38.1%) MSM in Colombo had sought medical care, with as many as one quarter (25.0%) of them experiencing any difficulty getting medical care when they sought it, in most cases related to long waiting times.

**Table 120: Use of healthcare services in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sought medical care for any reason	Yes	126/350 (36.0)	38.1 (31.6, 44.8)
	Don't know	4/354 (1.1)	-
Had difficulty getting medical care when they sought it	Yes	30/126 (23.8)	25.0 (16.1, 33.9)
Type of difficulty (multiple response) <sup>1</sup>	Too expensive	2/29 (6.9)	(10.1 (0.0, 23.2))
	Too far away	0/29 (0.0)	-
	Could not take time from work	4/29 (13.8)	(9.6 (0.8, 18.4))
	Long waiting times	25/29 (86.2)	(90.3 (81.5, 99.3))
	Rather not say	1/30 (3.3)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

One-third (40.2%) of MSM in Colombo have been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the three months preceding the survey. Among those who have,

most have received condoms and lubricants (93.7%), or counselling on condom use and safe sex (89.6%). In addition, one in three (32.3%) MSM in Colombo has tested for an STI in the three months preceding the survey. Coverage by HIV prevention programs, defined as receipt of at least two interventions (i.e., Given condoms and lubricant; Counselling on condom use and safe sex; Received an STI test) in the past three months, is somewhat low, at 32.9%.

**Table 121: Coverage of HIV prevention programs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the past 3 months	Yes	125/350 (35.7)	37.8 (31.4, 44.1)
	Don't know	4/354 (1.1)	-
Services received	General HIV/STI prevention/transmission information	96/125 (76.8)	77.0 (68.9, 85.1)
	Condoms and lubricants	115/125 (92.0)	93.7 (89.0, 98.2)
	Referral for STI treatment	13/125 (10.4)	6.7 (2.3, 10.9)
	Referral for VCT	5/125 (4.0)	1.1 (0.0, 2.1)
	Counselling on condom use and safe sex	107/125 (85.6)	89.6 (84.8, 94.5)
Tested for sexually transmitted diseases in the past 3 months	Yes	126/352 (35.8)	32.3 (26.4, 38.2)
	Don't know	2/354 (0.6)	-
3.7C Coverage of HIV prevention programs <sup>1</sup>		109/354 (30.8)	32.9 (26.7, 39.2)

<sup>1</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Tested for sexually transmitted diseases)

As many as 15.3% of MSM in Colombo have been refused health care and close to one in ten has been refused police assistance (8.1%) on the basis of being an MSM. Prevalence of violence is also somewhat high, with more than a third (37.0%) of MSM in Colombo experiencing verbal harassment, 9.6% experiencing physical violence, and 5.7% experiencing sexual violence.

### Experiences of Discrimination and Violence on the basis of being an MSM

**Table 122: Experiences of Discrimination and Violence on the basis of being an MSM**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Refused health care	Yes	50/349 (14.3)	15.3 (11.4, 19.4)
	Don't know	5/354 (1.4)	-
Refused police assistance	Yes	28/349 (8.0)	8.1 (4.9, 11.3)
	Don't know	5/354 (1.4)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Verbally insulted	Yes	118/350 (33.7)	37.0 (30.7, 43.4)
	Don't know	3/354 (0.8)	-
	Rather not say	1/354 (0.3)	-
Hit, kicked, or beaten	Yes	31/351 (8.8)	9.6 (5.6, 13.6)
	Rather not say	3/354 (0.8)	-
Sexually assaulted or raped	Yes	19/351 (5.4)	5.7 (2.9, 8.5)
	Don't know	3/354 (0.8)	-
Sexual assailant/rapist <sup>1</sup>	Stranger	15/19 (78.9)	-
	Social acquaintance	2/19 (10.5)	-
	Family/relative	2/19 (10.5)	-
	Police	0/19 (0.0)	-
	Paying sexual partner (Client)	0/19 (0.0)	-
	Non-paying partner or boyfriend/ girlfriend	0/19 (0.0)	-
	Sought medical treatment for sexual assault/rape <sup>1</sup>		3/19 (15.8)
Reported sexual assault/rape to the police <sup>1</sup>		2/19 (10.5)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Alcohol and Drugs

Only about half of MSM in Colombo have ever had a drink containing alcohol (40.6%), and among those who have, about half (52.9%) have a drink containing alcohol at least once a week.

**Table 123: Alcohol consumption**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had a drink containing alcohol	Yes	146/352 (41.5)	40.6 (34.2, 46.9)
	Don't know	2/354 (0.6)	-
Alcohol consumption in the past month	I never drink alcohol	1/142 (0.7)	0.9 (0.0, 2.7)
	At least once a week	70/142 (49.3)	52.9 (42.6, 63.4)
	Less than once a week	32/142 (22.5)	20.7 (11.4, 29.9)
	Never in the past month	19/142 (13.4)	12.1 (4.5, 19.4)
	Every day	20/142 (14.1)	13.5 (7.2, 19.8)
	Don't know	4/146 (2.7)	-

Drug use is somewhat prevalent among MSM in Colombo, with 4.9% having used heroin in year preceding the survey. However, much fewer have used other non-prescribed/illicit drugs.

**Table 124: Use of non-prescribed/illicit drugs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of drug used			
Heroin	<i>Frequency of consumption</i>		
	Have never used	307/346 (88.7)	88.5 (84.3, 92.8)
	Never in the past 12 months	3/346 (0.9)	2.1 (0.0, 5.1)
	Monthly or less	0/346 (0.0)	-
	Several times a month	0/346 (0.0)	-
	Two to four times a month	1/346 (0.3)	0.4 (0.0, 1.2)
	Two to three times a week	2/346 (0.6)	0.5 (0.0, 1.4)
	Four or more times a week	16/346 (4.6)	4.0 (1.9, 6.2)
	Don't know	17/346 (4.9)	4.4 (1.7, 7.0)
Rather not say	8/354 (2.3)	-	
Cannabis	<i>Frequency of consumption</i>		
	Have never used	312/346 (90.2)	89.8 (85.8, 93.7)
	Never in the past 12 months	2/346 (0.6)	0.8 (0.0, 2.3)
	Monthly or less	1/346 (0.3)	0.2 (0.0, 0.5)
	Several times a month	1/346 (0.3)	0.1 (0.0, 0.2)
	Two to four times a month	0/346 (0.0)	-
	Two to three times a week	0/346 (0.0)	-
	Four or more times a week	12/346 (3.5)	3.5 (1.3, 5.7)
	Don't know	18/346 (5.2)	5.7 (2.5, 8.9)
Rather not say	8/354 (2.3)	-	
Cocaine	<i>Frequency of consumption</i>		
	Have never used	327/342 (95.6)	94.8 (91.4, 98.1)
	Never in the past 12 months	2/342 (0.6)	0.8 (0.0, 2.4)
	Monthly or less	0/342 (0.0)	-
	Several times a month	0/342 (0.0)	-
	Two to four times a month	0/342 (0.0)	-
	Two to three times a week	0/342 (0.0)	-
	Four or more times a week	0/342 (0.0)	-
	Don't know	13/342 (3.8)	4.4 (1.4, 7.4)
Rather not say	12/354 (3.4)	-	
Ecstasy	<i>Frequency of consumption</i>		
	Have never used	326/344 (94.8)	94.2 (90.8, 97.6)
	Never in the past 12 months	2/344 (0.6)	0.8 (0.0, 2.4)
	Monthly or less	0/344 (0.0)	-
	Several times a month	0/344 (0.0)	-
	Two to four times a month	0/344 (0.0)	-
	Two to three times a week	0/344 (0.0)	-
	Four or more times a week	0/344 (0.0)	-
	Don't know	16/344 (4.7)	5.0 (1.9, 8.1)
Rather not say	10/354 (2.8)	-	
Amphetamines	<i>Frequency of consumption</i>		
	Have never used	327/344 (95.1)	94.1 (90.6, 97.7)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Never in the past 12 months	2/344 (0.6)	0.8 (0.0, 2.4)
	Monthly or less	0/344 (0.0)	-
	Several times a month	0/344 (0.0)	-
	Two to four times a month	0/344 (0.0)	-
	Two to three times a week	0/344 (0.0)	-
	Four or more times a week	0/344 (0.0)	-
	Don't know	15/344 (4.4)	5.1 (1.8, 8.3)
	Rather not say	10/354 (2.8)	-
Opium	<i>Frequency of consumption</i>		
	Have never used	324/344 (94.2)	94.1 (90.8, 97.4)
	Never in the past 12 months	2/344 (0.6)	0.8 (0.0, 2.4)
	Monthly or less	0/344 (0.0)	-
	Several times a month	0/344 (0.0)	-
	Two to four times a month	0/344 (0.0)	-
	Two to three times a week	0/344 (0.0)	-
	Four or more times a week	0/344 (0.0)	-
	Don't know	18/344 (5.2)	1.1 (2.1, 8.0)
	Rather not say	10/354 (2.8)	-
Hashish	<i>Frequency of consumption</i>		
	Have never used	326/345 (94.5)	94.3 (90.9, 97.7)
	Never in the past 12 months	2/345 (0.6)	0.8 (0.0, 2.4)
	Monthly or less	0/345 (0.0)	-
	Several times a month	0/345 (0.0)	-
	Two to four times a month	0/345 (0.0)	-
	Two to three times a week	0/345 (0.0)	-
	Four or more times a week	0/345 (0.0)	-
	Don't know	17/345 (4.9)	4.9 (1.8, 8.0)
	Rather not say	9/354 (2.5)	-
Other drugs	<i>Frequency of consumption</i>		
	Have never used	313/343 (91.3)	91.7 (87.7, 95.6)
	Never in the past 12 months	2/343 (0.6)	0.8 (0.0, 2.4)
	Monthly or less	2/343 (0.6)	0.5 (0.0, 1.2)
	Several times a month	3/343 (0.9)	0.7 (0.0, 1.8)
	Two to four times a month	1/343 (0.3)	0.1 (0.0, 0.4)
	Two to three times a week	4/343 (1.2)	0.9 (0.0, 2.0)
	Four or more times a week	1/343 (0.3)	0.1 (0.0, 0.3)
	Don't know	17/343 (5.0)	5.1 (2.0, 8.2)
	Rather not say	11/354 (3.4)	-

**Table 125: Use of non-prescribed/illicit drugs by injection**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever injected drugs for non-medical purposes	Yes	9/333 (2.7)	1.4 (0.4, 2.5)
	Don't know	19/354 (5.4)	-
	Rather not say	2/354 (0.6)	-
Ever used non-sterile injecting equipment when injecting drugs <sup>1</sup>		3/9 (33.3)	-
Safe injecting practice <sup>1,2</sup>		2/9 (22.2)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. <sup>2</sup> % Used a sterile needle and syringe at last injection

**Table 126: Use of non-prescribed/illicit drugs by injection in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Injected drugs for non-medical purposes in the past 12 months <sup>1</sup>		3/9 (33.3)	-
Frequency of injecting drugs <sup>1</sup>	Monthly or less	0/3 (0.0)	-
	Two to four times a month	1/3 (33.3)	-
	Two to three times a week	0/3 (0.0)	-
	Four or more times a week	2/3 (66.6)	-
Type of drug that was injected (multiple response) <sup>1</sup>	1. Heroin	3/3 (100.0)	-
	2. Cocaine	0/3 (0.0)	-
	3. Crack cocaine	0/3 (0.0)	-
	4. Churus/Ash	0/3 (0.0)	-
	5. Meth/amphetamine	0/3 (0.0)	-
	6. Ganja Mal	0/3 (0.0)	-
	7. Methadone	0/3 (0.0)	-
	8. Kerala Ganja	0/3 (0.0)	-
	9. Ganja	0/3 (0.0)	-
	10. Sudol (tablet)	0/3 (0.0)	-
	11. Rifernol (tablet)	0/3 (0.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Media

In regards to media usage, MSM in Colombo most frequently watch TV (most days or every day: 93.7%) or listen to the radio (most days or every day: 89.1%). Much fewer ever read the newspaper (55.2%). Over half of MSM in Colombo ever use the Internet (57.7%) and about one in three at least sometimes uses the Internet to find sexual partners (33.9%). Finally, almost all (96.4%) MSM in Colombo have a mobile phone.

**Table 127: Use of media in the past 30 days**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Radio	Never	33/353 (9.3)	8.2 (4.8, 11.4)
	Once a month	6/353 (1.7)	0.7 (0.1, 1.4)
	Once a week	11/353 (3.1)	2.0 (0.8, 3.3)
	Most days	204/353 (57.8)	62.4 (56.6, 68.3)
	Every day	99/353 (28.0)	26.7 (21.2, 32.1)
	Rather not say	1/354 (0.3)	-
TV	Never	18/354 (5.1)	3.6 (1.8, 5.4)
	Once a month	5/354 (1.4)	1.3 (0.0, 2.6)
	Once a week	6/354 (1.7)	1.3 (0.2, 2.4)
	Most days	198/354 (55.9)	59.8 (53.7, 65.9)
	Every day	127/354 (35.9)	33.9 (28.1, 39.7)
Newspaper	Never	182/354 (51.4)	54.8 (47.7, 61.9)
	Once a month	21/354 (5.9)	5.2 (2.8, 7.6)
	Once a week	68/354 (19.2)	19.8 (14.4, 25.2)
	Most days	64/354 (18.1)	14.9 (10.9, 18.9)
	Every day	19/354 (5.4)	5.2 (2.6, 7.8)
Internet	Never	155/354 (43.8)	42.3 (36.6, 48.1)
	Once a month	9/354 (2.5)	3.5 (0.7, 6.4)
	Once a week	36/354 (10.2)	12.1 (8.2, 16.0)
	Most days	94/354 (26.6)	26.5 (21.3, 31.8)
	Every day	60/354 (16.9)	15.5 (11.0, 20.0)
Uses Internet to find sexual partners	Never	233/352 (66.2)	66.1 (60.9, 71.5)
	Once a month	10/352 (2.8)	2.6 (0.7, 4.4)
	Once a week	21/352 (5.9)	6.1 (3.4, 8.7)
	Most days	79/352 (22.4)	22.8 (18.3, 27.1)
	Every day	9/352 (2.6)	2.5 (0.6, 4.4)
	Rather not say	2/354 (0.6)	-
Has a mobile phone		336/354 (94.9)	96.4 (94.7, 98.2)

### Multiplier questions

In May, June or July of 2017, 59.6% of MSM in Colombo have received any services (educational leaflets, condoms, HIV counselling) from the NGO Heart to Heart. Somewhat fewer (49.1%) have received condoms from the same NGO and 29.1% were escorted by NGO Heart to Heart's staff to an STI clinic. About one in five MSM in Colombo (20.2%) received a purse by peer educators during their outreach work in October/November 2017.

**Table 128: Multiplier questions**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Received any services (educational leaflets, condoms, HIV counselling) from the NGO Heart to Heart in Colombo in May, June or July 2017	Yes Don't know	211/350 (60.3) 4/354 (1.1)	59.6 (53.1, 66.1) -
Received condoms from the NGO Heart to Heart in Colombo in May, June or July 2017	Yes Don't know	183/350 (52.3) 4/354 (1.1)	49.1 (42.1, 56.1) -
Escorted to an STI clinic by the staff of the NGO Heart to Heart in Colombo in May, June or July 2017?	Yes Don't know Rather not say	119/348 (34.2) 5/354 (1.4) 1/354 (0.3)	29.1 (23.4, 34.9) - -
Received a purse by peer educators (staff of the NGO Heart to Heart in Colombo) in the week of 28 October-2 November 2017 during their outreach work	Yes Don't know	77/348 (22.1) 6/354 (1.7)	20.2 (14.2, 26.2) -
Participated in the first IBBS in Sri Lanka in 2014 <sup>1</sup>	Yes In Colombo In Galle In Anuradhapura	26/293 (8.9) 26/26 (100.0) 0/26 (0.0) 0/26 (0.0)	9.7 (5.5, 13.7) - - -

<sup>1</sup> Question added after fieldwork had started (59 respondents did not provide an answer)

### 3.2.2. MSM Galle

A total of 361 MSM respondents were recruited in Galle, including 5 seeds. For estimates, Gile's SS with population size estimate of 1,078 was used (low estimate 355, high estimate 1,800), along with 0.95 confidence intervals, and 5,000 bootstraps. Across the tables presented below, because estimates based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Homophily, and Convergence

As mentioned in the previous sections, a homophily value of one means no homophily, while values above one show the presence of positive homophily (e.g. people are recruiting similar to themselves), and values below 1 mean negative homophily (e.g. people are recruiting different from themselves). Amongst MSMs in Galle, the homophily ranged from 0.73 to 1.29, overall this can be interpreted as weak

homophily. Out of seven key indicators, four are clearly converging around the 150<sup>th</sup> participant. For the remaining three key indicators, population estimates show a tendency of becoming stable only nearing the end of sampling. Specifically, age starts to converge only around the 300<sup>th</sup> participant. For income, populations estimates started to become stable only after the 250<sup>th</sup> participant. Given that the sample size has been reached, avoidance of HIV services is measured only among participants who have not had an HIV test and considering that was a somewhat high non-response for income among MSM in Galle, this is not likely to have an impact on the results interpretation.

**Table 129: Homophily analysis**

	<i>Target indicator</i>	<i>Recruitment homophily</i>	<i>Estimated population homophily</i>
1	prevalence among MSM <sup>1</sup> (% HIV positive)	-	-
2	Active syphilis among MSM <sup>2</sup>	-	-
3	Viral hepatitis among MSM (HBV) <sup>1</sup>	-	-
4	HIV and hepatitis co-infection among MSM <sup>1</sup>	-	-
5	Knowledge of HIV status among MSM <sup>3</sup> (% Know HIV status from an HIV test)	1.07	1.08
6	Coverage of HIV prevention programs among MSM <sup>4</sup> (% Reached with HIV/AIDS prevention programs)	(1.04)	-
7	Condom use among MSM (% Used a condom the last time they had anal sex with a male partner)	(1.01)	-
8	Discriminatory attitudes towards PLHIV <sup>5</sup> (% who answer 'No' to at least one of the two questions)	1.08	1.40
9	Avoidance of HIV services because of stigma and discrimination among MSM <sup>6</sup> (% who answer 'Yes' to at least one of the reasons)	(1.17)	-
10	Age (% Mdn+)	1.17*	1.21
11	Income (% 20,000 Rs.+)	1.05	1.18

<sup>1</sup> Not calculated because there were not any positive cases. <sup>2</sup> Not calculated because there was one positive case. <sup>3</sup> Tested and positive or tested in the past 12 months and negative. <sup>4</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Tested for STI). <sup>5</sup> Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?; Do you think that children living with HIV should be able to attend school with children who are HIV negative? <sup>6</sup> Did not seek HIV testing/prevention/treatment services because of: Fear of or concern about stigma by staff or neighbours; Fear of or concern about or experienced violence; Fear of or concern about or experienced police harassment or arrest. This Global AIDS Monitoring indicator has changed. Please see Global AIDS Monitoring 2018, pg. 96.

\*  $p < 0.05$

### Recruitment

Recruitment started with four initial respondents (seeds), with the fifth seed added during fieldwork. Among them, two were more productive than the other three, accounting for 29.6% and 29.4% of the total sample. Through the other three seeds, 18.6, 11.4, and 11.1% of the total sample was recruited.

Figure 12. Recruitment tree – MSM Galle

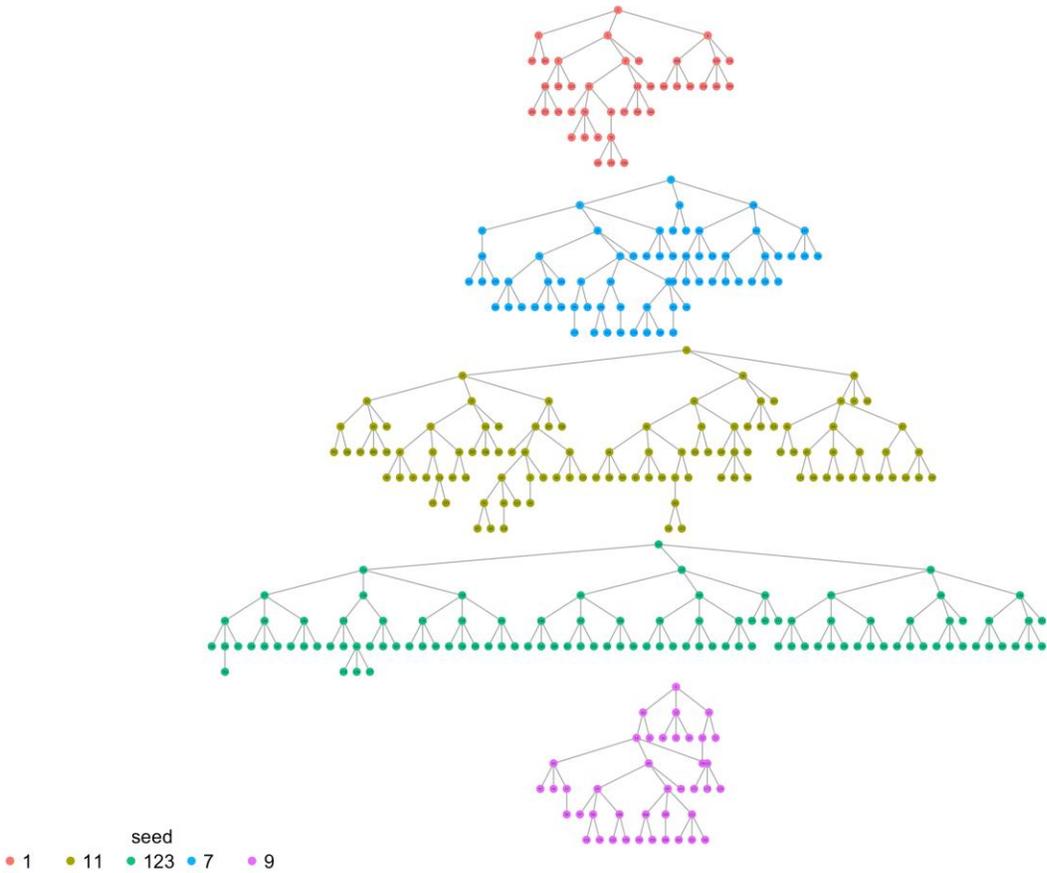


Table 130: Recruitment information

Characteristic	Responses	Sample proportion n/N (%)
Main reason for participation	Interest in HIV and sexual health	5/361 (1.4)
	HIV test	332/361 (92.0)
	Interest in issues related to MSM	10/361 (2.8)
	Helping the community	0/361 (0.0)
	Friend wanted me to participate	14/361 (3.9)
	Someone forced me	0/361 (0.0)
	Incentive/Gift	0/361 (0.0)
Mode of receiving the coupon	Received the coupon from a friend/ acquaintance	356/361 (98.6)
	Found the coupon laying around somewhere	0/361 (0.0)
	Bought or exchanged it for something	0/361 (0.0)
	Seed (from the IBBS office)	5/361 (1.4)
Acquaintances for:	< 6 months	16/356 (4.5)
	6 months – 1 year	37/356 (10.4)
	> 1 year	303/356 (85.1)
Screener’s confidence that participant is MSM	Confident	361/361 (100)
	Somewhat confident	0/361 (0.0)

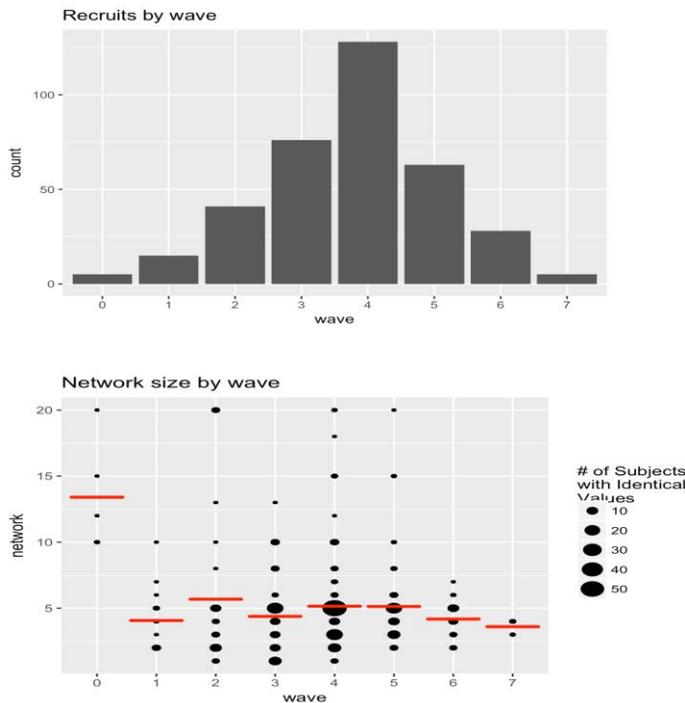
On average, study participants knew about seven other MSM. When asked how many of the MSM they knew who were at least 18 years of age, who lived in Galle, and who they have seen in the past one month, on average, study participants knew five other MSM.

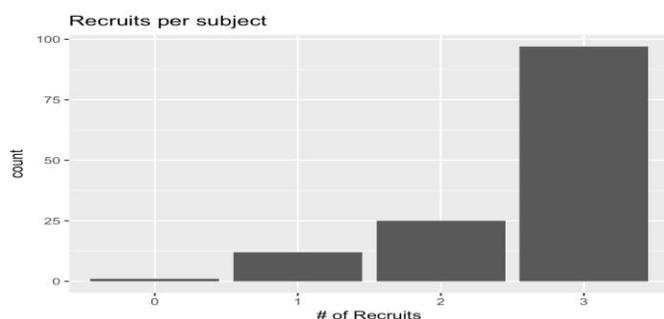
**Table 131: Network size questions**

Characteristic	Sample statistics
How many How many men do you know (they know your name and you know theirs), who have had sex with men in the last 6 months?	$M (SD) = 7.2 (5.48)$ Mdn = 5 Range = 2 - 40
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many are above the age of 18?	$M (SD) = 6.8 (5.08)$ Mdn = 5 Range = 2 - 37
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many live, work or study in Galle?	$M (SD) = 6.1 (4.31)$ Mdn = 5 Range = 1 - 30
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many have you seen in the past 1 month? <sup>1,2</sup>	$M (SD) = 5.0 (3.60)$ Mdn = 5 Range = 1 - 20

<sup>1</sup> Twelve respondents reported the value of zero. Their answers were imputed with the value of one. <sup>2</sup> In the estimation of population frequencies and statistics, this question was used as the network size question.

**Figure 13. Recruitment diagnostics – MSM Galle**





A total of seven waves were reached among MSM in Galle, with the majority of respondents recruited in waves three and four (35.5 and 21.1%, respectively). As is expected, the average network size is the highest in wave zero and lower in subsequent waves, ranging from 13 (Mdn = 12) in wave zero to four in the final, seventh, wave. Overall, recruitment in Galle went well, with a majority of study participants recruiting in the study three other MSM.

### Biological Indicators

The prevalence of HIV amongst MSM in Galle is zero, while the Syphilis prevalence is 0.3% by VDRL, TPPA and onsite testing.

**Table 132: Biological test results**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Positive for HIV		0/361 (0)	-
Positive for syphilis (VDRL)	Weakly reactive	1/361 (0.3)	0.3 (0.0, 0.7)
Positive for syphilis (TPPA)		1/361 (0.3)	0.3 (0.0, 0.7)
Positive for syphilis (onsite testing)		1/361 (0.3)	0.3 (0.0, 0.7)
Positive for hepatitis B surface antigen		0/361 (0)	-
HIV and hepatitis co-infection		0/361 (0)	-

### Socio-Demographic Characteristics

All MSM in Galle were born in Sri Lanka and have Sri Lankan citizenship. District of residence in the past year has for a majority of them has been Galle (98.6%).

**Table 133: Citizenship and Residence**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Citizenship	Sri Lankan	361/361 (100)	-
Country of birth	Sri Lanka	361/361 (100)	-
District of residence in the past year	Galle	356/361 (98.6)	98.6 (97.2, 99.9)
	Other	5/361 (1.4)	1.4 (1.2, 2.8)
Primary residence is Galle		359/361 (99.4)	99.8 (99.6, 99.9)

The mean age of MSM in Galle is 25.1 years, with a majority younger than 35 years of age (88.3%). With regard to ethnicity and language spoken at home, almost all (99.9% and 99.1%, respectively) of MSM in Galle are Sinhalese. Almost all MSM in Galle can read and write (99.7%) and all have attended at least some formal education. Close to two thirds of MSM in Galle are in paid work or work occasionally (62.0%), and most earn more than 20,000 Sri Lankan Rupees per month (127 USD).

**Table 134: Core socio-demographic indicators**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
	Sample	Pop. est.		
Age	M ( <i>SD</i> ) = 25.5 (7.54) Mdn = 23.0 N = 361 Range = 18 - 52	M ( <i>SD</i> ) = 25.1 (7.39) Mdn = 23.0 - -	-	-
Age groups	18 - 24 25 - 34 35 - 44 ≥ 45		205/361 (56.8) 108/361 (29.9) 38/361 (10.5) 10/361 (1.8)	60.0 (54.5, 65.5) 28.3 (23.4, 33.1) 8.8 (6.0, 11.6) 2.9 (1.0, 4.9)
Sex	Man TGW		361/361 (100.0) 0/361 (0.0)	- -
Sex same as at birth	Yes No		359/361 (99.4) 2/361 (0.6)	99.6 (99.2, 100.0) 0.4 (0.0, 0.8)
Ethnicity	Sinhalese Sri Lankan Tamil Indian Tamil Moor/Muslim Burgher Malay Other		360/361 (99.7) 1/361 (0.3) 0/361 (0.0) 0/361 (0.0) 0/361 (0.0) 0/361 (0.0) 0/361 (0.0)	99.9 (99.7, 100.0) 0.1 (0.0, 0.3) - - - - -
Languages spoken at home (multiple response)	Sinhalese Tamil English Other		359/361 (99.5) 1/361 (0.3) 0/361 (0.0) 0/361 (0.0)	99.1 (97.5, 100.0) 0.1 (0.0, 0.3) - -
Can read and write	Yes No		360/361 (99.7) 1/361 (0.3)	99.7 (99.2, 100.0) 0.3 (0.0, 0.8)
Completed level of education	Never attended school Grade 1-5 Grade 6-10 Passed O/L Passed A/L Completed Diploma Completed Degree		0/361 (0.0) 4/361 (1.1) 226/361 (62.6) 89/361 (24.7) 42/361 (11.6) 0/361 (0.0) 0/361 (0.0)	- 0.8 (0.2, 1.5) 65.2 (60.6, 69.7) 24.3 (20.4, 28.2) 9.7 (7.2, 12.2) - -
Main activity	In paid work (including parental or other leave)		221/359 (61.6)	57.4 (51.7, 63.1)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Occasional work	18/359 (5.0)	4.6 (2.2, 7.0)
	In unpaid or voluntary work	0/361 (0.0)	-
	Unemployed	115/359 (32.0)	36.6 (31.0, 42.3)
	Student	4/359 (1.1)	1.2 (0.1, 2.4)
	Retired	1/359 (0.3)	0.1 (0.0, 0.3)
	Rather not say	2/361 (0.6)	-
Income	< 5,000 Rupees	26/290 (9.0)	10.4 (6.0, 15.0)
	5,000-10,000	9/290 (3.1)	4.8 (1.5, 8.3)
	10,001-20,000	22/290 (7.6)	6.1 (3.2, 8.6)
	20,001-30,000	91/290 (31.4)	29.8 (24.4, 35.0)
	30,001-40,000	83/290 (28.6)	28.6 (23.3, 33.9)
	> 40,000 Rupees	33/290 (11.4)	10.2 (7.1, 13.2)
	Don't know	26/290 (9.0)	10.2 (6.1, 14.5)
	Rather not say	71/361 (19.7)	-

Over two-thirds of MSM in Galle live in their parent's home (76.2%). On average, MSM in Galle live with three other people, and one-third (34.2%) share their household with at least one child. Over two-thirds of MSM in Galle are currently not in a relationship (69.0%). Among those who are in a relationship/marriage, slightly more than half (55.7%) of MSM in Galle are in a relationship with a man.

**Table 135: Household information and family life**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of residence	Temporary shelter	6/361 (1.7)	0.7 (0.4, 1.1)
	Boarding house	4/361 (1.1)	0.7 (0.1, 1.4)
	Parents' home	270/361 (74.8)	76.2 (71.9, 80.5)
	My own home	79/361 (21.9)	21.9 (17.8, 26.0)
	Lodging	1/361 (0.3)	0.2 (0.0, 0.5)
	On the street	0/361 (0.0)	-
	Brothel	0/361 (0.0)	-
	Other	1/361 (0.3)	0.2 (0.0, 0.6)
Number of household members	Sample $M (SD) =$ 3.9 (1.17) Mdn = 4.0 $N = 359$ Range = 1 - 7	Pop. est. $M (SD) = 3.8$ (1.16) Mdn = 4.0 - -	-
Number of children currently living in the household	No children	235/359 (65.5)	65.8 (61.2, 70.3)
	One	73/359 (20.3)	19.1 (15.4, 22.8)
	Two	44/359 (12.3)	13.0 (9.3, 16.7)
	Three or more	7/359 (1.9)	2.1 (0.7, 3.6)
Number of children	No children	315/359 (87.7)	87.4 (84.3, 90.5)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	One	27/359 (7.5)	7.5 (5.1, 10.0)
	Two	14/359 (3.9)	4.3 (2.2, 6.5)
	Three or more	3/359 (0.8)	0.7 (0.0, 1.6)
Marital status	Single (Never married)	311/361 (86.1)	85.8 (82.6, 89.0)
	Married	47/361 (13.0)	13.6 (10.3, 16.8)
	Divorced/Separated	2/361 (0.6)	0.5 (0.0, 1.0)
	Widowed	1/361 (0.3)	0.2 (0.0, 0.4)
Cohabitation	Living together with a partner/spouse	56/361 (15.5)	16.4 (12.5, 20.2)
	Involved in a relationship without living together	73/361 (20.2)	14.7 (11.6, 17.7)
	Have no relationship/Do not have a partner	232/361 (64.3)	69.0 (64.2, 73.8)
Sex of partner	Woman	48/129 (37.2)	44.3 (36.8, 55.6)
	Man	81/129 (62.8)	55.7 (44.4, 63.2)
Self-identifies as: (multiple response)	MSM (gay man)	325/361 (90.0)	93.1 (91.1, 95.0)
	Nachchi	11/361 (3.0)	2.1 (0.8, 3.4)
	Male sex worker	23/361 (6.4)	4.5 (2.9, 6.1)
	Transgender woman	0/361 (0.0)	-
	Other MSM	2/361 (0.6)	0.7 (0.0, 1.5)

## HIV/AIDS

About a quarter of MSM in Galle have never heard of HIV/AIDS (28.3%). Among those who have, over half (58.9%) have received the most thorough information about HIV/AIDS from school. Among MSM in Galle who have heard of HIV/AIDS, over half (56.4%) have never discussed HIV/AIDS with any of their partners.

**Table 136: General knowledge about HIV/AIDS**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has heard of HIV/AIDS	Yes	257/354 (72.6)	71.7 (66.8, 76.6)
	No	97/354 (27.4)	28.3 (23.4, 33.2)
	Don't know	7/361 (1.9)	-
Main source of the most thorough understanding of HIV/AIDS	School	142/257 (55.3)	58.9 (52.1, 65.9)
	Health services	54/257 (21.0)	21.6 (16.2, 27.0)
	Workplace	1/257 (0.4)	0.3 (0.0, 0.9)
	Friends/Family	10/257 (3.9)	5.2 (1.7, 8.7)
	Television	4/257 (1.6)	0.9 (0.3, 1.6)
	Newspaper/Magazines	2/257 (0.8)	0.5 (0.0, 1.2)
	Posters/Billboards	10/257 (3.9)	2.0 (1.1, 2.9)
	Pamphlets/Leaflets	4/257 (1.6)	1.3 (0.0, 2.6)
	Radio	0/257 (0.0)	-
	NGOs	29/257 (11.3)	8.6 (5.1, 12.1)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Other	1/257 (0.4)	0.4 (0.0, 1.2)
Discussed HIV with any sexual partner	Yes, all	28/256 (10.9)	14.4 (9.2, 19.7)
	Yes, some	20/256 (7.8)	9.2 (4.8, 13.7)
	No, none	154/256 (60.2)	56.4 (49.8, 62.9)
	Don't Know	54/256 (21.1)	20.0 (14.4, 25.5)
	Rather not say	1/257 (0.4)	-
Partner ever disclosed their HIV status	Yes, all	27/48 (56.3)	59.9 (41.3, 79.2)
	Yes, some	18/48 (37.5)	37.4 (18.3, 56.8)
	No, none	2/48 (4.2)	1.5 (0.0, 2.2)
	Don't Know	1/48 (2.1)	1.2 (0.1, 2.2)
Knows somebody who is HIV-positive or has died of AIDS	Yes	5/256 (2.0)	1.4 (0.0, 2.7)
	No	251/256 (98.0)	98.6 (97.3, 100)
	Rather not say	1/257 (0.4)	-
Close friend or relative died of AIDS	Yes, close relative	1/256 (0.4)	0.3 (0.0, 0.8)
	Yes, close friend	1/256 (0.4)	0.2 (0.0, 0.4)
	Yes, close relative and close friend	0/256 (0.0)	-
	No	254/256 (99.2)	99.5 (99.0, 100)
	Rather not say	1/257 (0.4)	-

A majority of MSM in Galle perceive their personal HIV risk as low or none (76.2%) because they always use condoms (91.5%).

**Table 137: Perception of personal HIV risk**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Personal HIV risk	No risk	263/359 (73.3)	74.1 (69.6, 78.7)
	Low risk	8/359 (2.2)	2.1 (0.8, 3.3)
	Moderate risk	14/359 (3.9)	3.1 (1.6, 4.6)
	High risk	15/359 (4.2)	4.3 (1.8, 6.8)
	Don't know	59/359 (16.4)	16.4 (12.4, 20.4)
	Rather not say	2/361 (0.6)	-
Reasons for perceiving the risk as moderate or high (multiple response) <sup>1</sup>	Many sexual partners	21/29 (72.4)	(68.7 (50.5, 86.6))
	Didn't always use condoms	8/29 (27.6)	(23.6 (9.0, 37.7))
	Injected drugs	0/29 (0.0)	-
	Partner has other partners	6/29 (20.7)	(27.4 (8.4, 46.3))
Reasons for perceiving no or low risk (multiple response)	Trust my partner/s	27/271 (10.0)	8.9 (5.8, 11.9)
	Always use condoms	246/271 (90.8)	91.5 (88.5, 94.7)
	Don't know	2/271 (0.7)	0.6 (0.0, 1.2)

Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

Knowledge about HIV prevention is somewhat high amongst MSM in Galle, with half (49.3%) able to correctly identify modes of sexual transmission of HIV and reject major misconceptions about

transmission HIV. When looking at specific items that the composite indicator consists of, most of MSM in Galle know that the risk of getting HIV can be reduced by using a condom every time one has sex (68.6%) and that the risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners (67.2%). Somewhat fewer also know that a healthy-looking person can have HIV (60.9%).

**Table 138: GAM 5.1 Knowledge about HIV prevention, disaggregated by age**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners	<u>Among all</u> Yes	242/354 (68.4)	67.2 (63.0, 71.3)
	<u>Among those aged 18 – 24</u> Yes	139/201 (69.2)	68.3 (60.7, 75.7)
Person can reduce the risk of getting HIV by using a condom every time he/she has sex	<u>Among all</u> Yes	243/354 (68.6)	68.6 (64.6, 72.7)
	<u>Among those aged 18 – 24</u> Yes	142/201 (70.6)	70.8 (63.2, 78.5)
Healthy-looking person can have HIV	<u>Among all</u> Yes	218/354 (61.6)	60.9 (56.6, 65.3)
	<u>Among those aged 18 – 24</u> Yes	124/201 (61.7)	61.1 (53.5, 68.7)
Person cannot get HIV from mosquito bites	Among all No	229/354 (64.7)	63.9 (59.7, 68.1)
	<u>Among those aged 18 – 24</u> No	134/201 (66.7)	66.0 (58.3, 73.5)
Person cannot get HIV by sharing food with someone who is infected	<u>Among all</u> No	225/354 (63.6)	64.5 (60.4, 68.5)
	<u>Among those aged 18 – 24</u> No	131/201 (65.2)	67.1 (59.9, 74.6)
Composite indicator for knowledge about HIV prevention (1-5 <sup>1</sup> )	<u>Among all</u> # of correct answers		
	None	98/354 (27.7)	28.4 (23.7, 33.1)
	One	2/354 (0.6)	0.3 (0.0, 0.7)
	Two	9/354 (2.5)	2.5 (0.8, 4.2)
	Three	18/354 (5.1)	4.7 (2.5, 6.8)
	Four	52/354 (14.7)	14.8 (11.0, 18.5)
	Five	175/354 (49.4)	49.3 (44.2, 54.5)
	<u>Among those aged 18 - 24</u> # of correct answers		
	None	51/201 (25.4)	25.2 (18.8, 31.5)
	One	2/201 (1.0)	0.6 (0.0, 1.1)
	Two	5/201 (2.5)	3.2 (0.4, 6.1)
	Three	10/201 (5.0)	5.0 (1.6, 8.5)
	Four	37/201 (18.4)	19.0 (12.7, 25.3)
	Five	96/201 (47.8)	47.1 (39.3, 54.7)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
HIV can be transmitted from mother to her unborn child	Yes	264/361 (73.1)	71.4 (66.6, 76.2)
	No	26/361 (7.2)	5.9 (3.8 8.0)
	Don't know	71/361 (19.7)	22.7 (18.0 27.4)
Ever heard of ART	Yes	99/361 (27.4)	28.2 (23.0 33.3)
	No	209/361 (57.9)	54.4 (49.3 59.4)
	Don't know	53/361 (14.7)	17.5 (12.7 22.3)

<sup>1</sup> Don't know is recorded as incorrect. Numerator for individual and the composite indicator excludes those who have never heard of HIV/AIDS, while all who had a valid answer to the question regarding whether they had ever heard of HIV/AIDS are included in the denominator.

Among MSM in Galle who have ever heard of HIV/AIDS, the majority (89.2%) exhibit a discriminatory attitude towards PLHIV, with somewhat more saying that they would not buy fresh vegetables from a shopkeeper or vendor if she knew that this person had HIV (88.6%) than saying that they think children living with HIV should not be able to attend school with children who are HIV negative (82.6%).

**Table 139: GAM 4.1 Discriminatory attitudes towards PLHIV, disaggregated by age**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Thinks that children living with HIV should be able to attend school with children who are HIV negative	<u>Among all</u>		
	Yes	58/251 (23.1)	17.4 (13.0, 21.7)
	No	193/251 (76.9)	82.6 (78.3, 87.0)
	Don't Know/Not sure/It depends	6/257 (2.3)	-
	<u>Among those aged 18-49</u>		
	Yes	58/251 (23.1)	17.4 (13.0, 21.7)
	No	193/251 (76.9)	82.6 (78.3, 87.0)
	Don't know/Not sure/It depends	6/257 (2.3)	-
	<u>Among those aged 25-49 years</u>		
	Yes	19/104 (18.3)	11.8 (7.1, 16.4)
No	85/104 (81.7)	88.2 (83.6, 92.9)	
Don't know/Not sure/It depends	3/107 (2.8)	-	
Would buy fresh vegetables from a shopkeeper or vendor if he/she knew that this person had HIV?	<u>Among all</u>		
	Yes	35/234 (15.0)	11.4 (7.6, 15.1)
	No	199/234 (85.0)	88.6 (84.9, 92.4)
	Don't Know/Not sure/It depends	23/257 (8.9)	-
	<u>Among those aged 18-49</u>		
	Yes	35/234 (15.0)	11.4 (7.6, 15.1)
	No	199/234 (85.0)	88.6 (84.9, 92.4)
	Don't know/Not sure/It depends	23/257 (8.9)	-
	<u>Among those aged 25-49 years</u>		
	Yes	7/96 (7.3)	5.4 (1.9, 8.9)
No	89/96 (92.7)	94.6 (91.1, 98.1)	
Don't know/Not sure/It depends	11/107 (10.3)	-	

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Composite indicator for discriminatory attitudes towards PLHIV (1-2 <sup>1</sup> )	Responded 'No' to either of the two questions		
	<u>Among all</u>	218/254 (85.8)	89.2 (85.7, 92.7)
	<u>Among those aged 18-49</u>	218/254 (85.8)	89.2 (85.7, 92.7)
	<u>Among those aged 25-49</u>	98/106 (92.5)	94.6 (91.4, 97.8)

<sup>1</sup> Participants who responded don't know/not sure/it depends and those who refused to answer were excluded from the analysis. Numerator: Number of respondents who respond no to either of the two questions; Denominator: Number of all respondents who have heard of HIV.

Two-thirds (68.8%) of MSM in Galle know where to receive an HIV test, with a majority (97.3%) mentioning government STI clinic as a place that they know offers an HIV test. Although half (48.6%) of MSM in Galle have ever tested for HIV, and only slightly fewer (45.6%) have received an HIV test within 12 months before the survey was carried out. Among those who ever did receive an HIV test, all have received their last HIV test at a government STI clinic.

**Table 140: HIV testing**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Knows where to receive an HIV test		249/361 (69.0)	68.8 (63.3, 74.2)
Places that offer HIV testing (multiple response)	Government clinic – STI	242/249 (97.2)	97.3 (94.9, 99.7)
	Government clinic – non-STI	1/249 (0.4)	0.2 (0.0, 0.4)
	Private clinic	7/249 (2.8)	2.5 (0.2, 4.9)
	Private pharmacy or chemist	0/249 (0.0)	-
	Traditional healer/herbalist	0/249 (0.0)	-
	Don't know	2/249 (0.8)	0.7 (0.1, 1.4)
Knows HIV status from an HIV test <sup>1</sup>	No, I have never been tested	54/361 (15.0)	11.8 (8.6, 14.9)
	Yes, I have been tested	173/361 (47.9)	48.6 (43.4, 53.7)
	Rather not say	134/361 (37.1)	39.7 (34.5, 44.9)
Last HIV test *Refer to note below	< 6 months	142/173 (82.1)	83.0 (77.1, 89.2)
	6 – 12 months	21/173 (12.1)	10.9 (5.5, 16.0)
	> 12 Months	10/173 (5.8)	6.1 (1.9, 10.3)
Result of last HIV test	Negative	173/173 (100)	-
	Positive	0/173 (0.0)	-
	Indeterminate	0/173 (0.0)	-
	Didn't receive the result	0/173 (0.0)	-
Composite indicator for knowledge of HIV status <sup>1,2</sup> (1-3)	Yes**	163/361 (45.2)	45.6 (40.3, 50.9)
Last HIV test was voluntary		170/173 (98.3)	97.0 (94.0, 99.7)
Place where last HIV test was received	Government clinic – STI	173/173 (100)	-
	Government clinic – non-STI	0/173 (0.0)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Private clinic	0/173 (0.0)	-
	Private pharmacy or chemist	0/173 (0.0)	-
	Traditional healer/herbalist	0/173 (0.0)	-

1 Considering that over one-third of the respondents declined to provide a valid answer to this question, their answer was included in the base for calculation, so that the share of those who did receive an HIV test would not be inflated.<sup>2</sup> Numerator: Number of respondents who tested HIV-positive or who tested in the past 12 months and the result was negative; Denominator: Number of respondents who provided a valid answer to the question about their knowledge about their HIV status from an HIV test.

\*Note: There was potentially a lack of understanding, as the frequency is high.

\*\*Note: Refusals were included in the denominator for the calculation.

Among MSM in Galle who have never received an HIV test, a majority said it was because they don't know where to go to receive it (44.5%) or because they do not think they at risk of HIV (25.6%). About one in three (29.8%) of MSM in Galle avoids HIV services because of stigma and discrimination, namely due to fear or concern about stigma by staff and neighbours (26.8%).

**Table 141: Reasons for never receiving an HIV test**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Reasons for never receiving an HIV test (multiple response)	Don't know where to go	28/54 (51.9)	44.5 (30.7, 57.8)
	I always use condoms	4/54 (7.4)	9.9 (1.3, 18.2)
	Not at risk of getting HIV	13/54 (24.1)	25.6 (14.3, 37.2)
	Didn't have time/Too busy	9/54 (16.7)	13.7 (6.1, 20.8)
	I trust my partner	4/54 (7.4)	4.7 (1.5, 8.1)
	Afraid of knowing I may be HIV-positive	0/54 (0.0)	-
	Lack of confidentiality	4/54 (7.4)	8.9 (1.4, 16.3)
	Inconvenient testing location	1/54 (1.9)	1.7 (0.0, 4.1)
	No money	1/54 (1.9)	3.5 (0.0, 8.4)
	Don't know	2/54 (3.7)	3.7 (0.0, 7.6)
Never receiving an HIV test because of stigma and discrimination (multiple response)	Fear or concern about stigma by staff or neighbours	17/54 (31.5)	26.8 (15.3, 38.3)
	Fear of or concern about or experienced violence	5/54 (9.3)	6.1 (2.3, 9.9)
	Fear of or concern about or experienced police harassment or arrest	5/54 (9.3)	5.4 (2.8, 7.9)
4.2C Composite indicator for avoidance of HIV services because of stigma and discrimination (1-3)		20/54 (37.0)	29.8 (18.1, 41.5)

## Sexual Behaviour

Slightly less than half of MSM in Galle have ever had sex with a woman (44.1%). At first anal sex with a man, MSM in Galle were on average 18 years of age. Their first male partner was on average much older, at 34 years of age. Finally, only 14.4% of MSM in Galle visit outdoor sites (such as parks, streets, bus stations, etc.) to find partners.

**Table 142: General sexual history**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had sex with a woman (vaginal or anal intercourse)	Yes Rather not say		164/360 (45.6) 1/361 (0.3)	44.1 (38.7, 49.5) -
Age at first anal sex with a man	Sample <i>M (SD)</i> = 18.3 (2.22) Mdn = 18 <i>N</i> =360 Range= 12 – 31	Pop. est. <i>M (SD)</i> = 18.3 (2.13) Mdn = 18.0 - -	-	-
	< 18		76/360 (21.1)	17.4 (13.7, 21.0)
Age of partner at first anal sex with a man	Sample <i>M (SD)</i> = 33.1 (10.80) Mdn = 35.0 <i>N</i> =361 Range=14 – 60	Pop. est. <i>M (SD)</i> = 33.9 (10.81) Mdn =36.0 - -	-	-
Visits outdoor sites (such as parks, streets, bus stations, etc.) to find partners			60/361 (16.6)	14.4 (11.1, 17.7)

In the seven days before the survey, MSM in Galle on average had two sexual partners, although as many as one in four (24.9%) did not have any sexual partners in the week preceding the survey.

**Table 143: Sexual partners in the past 7 days**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of all sexual partners	Sample <i>M (SD)</i> = 2.0 (1.72) Mdn = 2.0 <i>N</i> =361 Range= 0 – 8	Pop. est. <i>M (SD)</i> = 1.8 (1.61) Mdn = 2.0 - -	-	-
	0		82/361 (22.7)	24.9 (19.9, 29.9)
	1		70/361 (19.4)	21.6 (16.9, 26.4)
	2 or more		209/361 (57.9)	53.4 (47.8, 59.1)

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of casual <sup>1</sup> sexual partners (among those who had at least one sexual partner in the past 7 days)	Sample <i>M (SD)</i> = 1.5 (1.42) Mdn =1.0 <i>N</i> = 279 Range= 0 – 7	Pop. est. <i>M (SD)</i> = 1.4 (1.34) Mdn = 1.0 - -	-	-
	0		72/279 (25.8)	27.6 (21.2, 34.0)
	1		87/279 (31.2)	32.7 (26.6, 38.9)
	2 or more		120/279 (43.0)	39.7 (33.2, 46.2)
Number of regular <sup>2</sup> sexual partners (among those who had at least one sexual partner in the past 7 days)	Sample <i>M (SD)</i> = 1.0 (0.90) Mdn = 1.0 <i>N</i> = 279 Range= 0 – 4	Pop. est. <i>M (SD)</i> = 0.9 (0.87) Mdn =1.0 - -	-	-
	0		86/279 (30.8)	33.3 (27.2, 39.6)
	1		126/279 (45.2)	43.7 (37.3, 50.0)
	2 or more		67/279 (24.0)	23.0 (18.0, 28.0)

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis

In the six months preceding the survey, MSM in Galle on average had eight sexual partners, with half of them had five or more sexual partners (53.4%). With regard to type of relationship, MSM in Galle on average had three times as many casual (six) than regular (two) sexual partners. Finally, at last anal sex, almost all (93.4%) MSM in Galle used a condom.

**Table 144: Sexual partners in the past 6 months**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of all sexual partners	Sample <i>M (SD)</i> = 8.6 (8.46) Mdn = 5.0 <i>N</i> = 361 Range=1 – 60	Pop. est. <i>M (SD)</i> = 7.7 (7.47) Mdn = 5.0 - -	-	-
	1 – 2		62/361 (17.2)	19.3 (14.8, 23.8)
	3 – 4		95/361 (26.3)	27.3 (22.8, 31.9)
	5 or more		204/361 (56.5)	53.4 (48.3, 58.5)
Number of casual <sup>1</sup> sexual partners	Sample <i>M (SD)</i> =	Pop. est. <i>M (SD)</i> =	-	-

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
	6.4 (8.11) Mdn = 3.0 N = 361 Range= 0 - 60	5.6 (7.14) Mdn = 3.0 - -		
	0 1 2 3 or more		56/361 (15.5) 40/361 (11.1) 64/361 (17.7) 201/361 (55.7)	17.1 (12.1, 21.9) 10.9 (7.6, 14.3) 19.4 (14.6, 24.1) 52.7 (47.4, 57.9)
Number of regular <sup>2</sup> sexual partners	Sample M (SD) = 2.2 (2.73) Mdn = 2.0 N = 361 Range= 0 - 19	Pop. est. M (SD) = 2.1 (2.49) Mdn = 2.0 - -	-	-
	0 1 2 3 or more		114/361 (31.6) 66/361 (18.3) 55/361 (15.2) 126/361 (34.9)	33.4 (27.4, 39.4) 16.3 (12.9, 19.8) 13.9 (10.9, 17.0) 36.4 (30.6, 42.1)
Condom use among MSM			332/361 (91.9)	93.4 (91.0, 95.8)

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis

Close to half (44.1%) of MSM in Galle had ever received money, goods or services in exchange for sex. Among them, most (96.4%) have received money, goods or services in exchange for sex in the past 12 months, with their last paying partner, in most cases (93.6%), being a man. Fewer MSM in Galle have ever given money, goods or services in exchange for sex (11.8%) and among them, 84.0% had given money, goods or services in exchange for sex in the past 12 months, with their last partner, in most cases (96.3%) being a man. Condom use at transactional sex was high; 92.8% of used a condom at last sex they were paid for, and somewhat fewer (79.4%) used a condom at last sex they paid for.

**Table 145: Transactional sex**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever received money, goods or services in exchange for sex		170/361 (47.1)	44.1 (38.2, 49.9)
Received money, goods or services in exchange for sex in the past 12 months		165/170 (97.0)	96.4 (92.8, 99.8)
Received money, goods or services in exchange for <u>anal sex with a man</u> in the past 12 months		164/165 (99.4)	99.3 (97.8, 100.0)
Sex of partner at last sex for which money was received	Woman	6/170 (3.5)	6.4 (0.2, 13.3)
	Man	164/170 (96.5)	93.6 (86.7, 99.8)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Used a condom at last sex for which money was received	Yes	152/169 (89.9)	92.8 (90.1, 96.5)
	No	17/169 (10.1)	7.2 (3.5, 9.9)
	Don't Remember	1/170 (0.6)	-
Ever given money, goods or services in exchange for sex		44/361 (12.2)	11.8 (8.4, 15.2)
Gave money, goods or services in exchange for sex with in the past 12 months		38/44 (86.4)	84.0 (68.8, 98.4)
Sex of partner at last sex for which money was given	Woman	3/44 (6.8)	3.7 (2.0, 3.8)
	Man	41/44 (93.2)	96.3 (96.2, 98.0)
Used a condom at last sex for which money, goods or services were given		35/44 (79.5)	79.4 (44.3, 100.0)

Four in five (83.0%) MSM in Galle had a casual male sexual partner in the six months before the survey. Among them, most (80.5%) have used a condom consistently in the past six months, with almost all (94.4%) having had used a condom at last anal sex with a casual partner. Over half (57.6%) of MSM in Galle did not know or ask their last casual male sexual partner about his HIV status.

**Table 146: Casual Male Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Had a casual <sup>1</sup> partner in the past 6 months		305/361 (84.5)	83.0 (78.0, 87.9)
Frequency of condom use in the past 6 months <sup>2</sup>	Every time	241/304 (79.3)	80.5 (75.6, 85.7)
	Almost every time	36/304 (11.8)	9.3 (5.8, 12.6)
	Sometimes	16/304 (5.3)	7.9 (3.9, 12.2)
	Never	10/304 (3.3)	1.8 (0.9, 2.6)
	Don't know	1/304 (0.3)	0.4 (0.0, 0.9)
Condom use at last anal sex with a casual partner	Yes	284/303 (93.7)	94.4 (91.5, 97.4)
	Don't remember	2/305 (0.7)	-
Reasons for not using a condom (multiple answers) <sup>3</sup>	Never heard of condoms	2/19 (10.5)	-
	Don't know how to obtain a condom	0/19 (0.0)	-
	I didn't think it was necessary	4/19 (21.1)	-
	I didn't think of it	2/19 (10.5)	-
	Not available	4/19 (21.1)	-
	Too expensive	0/19 (0.0)	-
	Partner objected	6/19 (31.6)	-
	Don't like them	5/19 (26.3)	-
	Condoms takes away pleasure	3/19 (15.8)	-
HIV status of the last casual partner	HIV negative	125/305 (41.0)	42.4 (36.5, 48.4)
	HIV positive	0/305 (0.0)	-
	Did not know / ask	180/305 (59.0)	57.6 (51.6, 63.5)

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> One respondent said he did not have a casual sexual partner in the past six months. <sup>3</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

Two-thirds (66.6%) of MSM in Galle had a regular male sexual partner in the six months before the survey, and most (44.8%) have met their last regular male sexual partner through friends. Among MSM in Galle who had a regular sexual partner in the past six months, one-third (37.0%) have used a condom consistently during sex, with two in three (67.0%) having had used a condom at last anal sex with a regular partner. Those who have not used a condom at last anal sex with a regular sexual partner in most cases did so because they did not like condoms (53.9%) or because they believed condoms take away pleasure (27.9%), although many also did not use a condom because their partner objected (26.7%). Finally, as many as one in five (20.8%) MSM in Galle did not know or ask their last regular male sexual partner about his HIV status.

**Table 147: Regular Male Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Had a regular <sup>1</sup> partner in the past 6 months		247/361 (68.4)	66.6 (60.4, 72.8)
Frequency of condom use in the past 6 months	Every time	82/247 (33.2)	37.0 (28.3, 46.5)
	Almost every time	52/247 (21.1)	20.9 (15.1, 26.7)
	Sometimes	85/247 (34.4)	33.3 (26.6, 39.7)
	Never	27/247 (10.9)	8.4 (5.2, 11.0)
	Don't know	1/247 (0.4)	0.5 (0.0, 1.3)
Condom use at last anal sex with a regular partner	Yes	157/246 (63.8)	67.0 (60.8, 73.7)
	Don't remember	1/247 (0.4)	-
Reasons for not using a condom (multiple answers)	Never heard of condoms	3/89 (3.4)	3.4 (0.0, 7.0)
	Don't know how to obtain a condom	0/89 (0.0)	-
	I didn't think it was necessary	14/89 (15.7)	14.1 (7.9, 20.4)
	I didn't think of it	7/89 (7.9)	9.3 (3.9, 14.8)
	Not available	13/89 (14.6)	18.2 (8.8, 27.7)
	Too expensive	0/89 (0.0)	-
	Partner objected	23/89 (25.8)	26.7 (14.0, 38.9)
	Don't like them	47/89 (52.8)	53.9 (43.3, 64.2)
	Condoms takes away pleasure	25/89 (28.1)	27.9 (18.2, 37.7)
How last regular partner was met <sup>2</sup>	Brothel	0/246 (0.0)	-
	Bar, café, disco or restaurant	6/246 (2.4)	2.3 (0.5, 4.2)
	Hotel	15/246 (6.1)	7.5 (3.6, 11.7)
	Street, park or public transport	38/246 (15.4)	13.3 (7.7, 18.5)
	Through friends	108/246 (43.9)	44.8 (37.0, 52.7)
	Internet (e.g. Facebook), chat / SMS	10/246 (4.1)	5.2 (1.9, 8.8)
	Motel or Guest House	27/246 (11.0)	9.8 (5.8, 13.7)
	School	1/246 (0.4)	0.5 (0.0, 1.1)
	Party	19/246 (7.7)	7.5 (3.8, 11.1)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Intermediary	4/246 (1.6)	1.8 (0.0, 3.6)
	Service station	10/246 (4.1)	4.6 (0.0, 14.4)
	Truck stop	0/246 (0.0)	-
	Massage Parlour / Spa	1/246 (0.4)	0.3 (0.0, 0.6)
	Other	7/246 (2.8)	2.4 (0.3, 4.4)
HIV status of the last regular partner	HIV negative	192/247 (77.7)	79.2 (73.8, 84.8)
	HIV positive	0/247 (0.0)	-
	Did not know / ask	55/247 (22.3)	20.8 (15.2, 26.2)

<sup>1</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis;

Fewer than half of MSM in Galle have ever had sex with a woman (44.1%). Among them, most have had a female sexual partner in the year before the survey (80.7%). Almost all (92.9%) MSM in Galle have consistently used a condom with female sexual partners in the year before the survey. At last sex with a female partner, 85.2% of MSM in Galle have used a condom at last sex with a female sexual partner.

**Table 148: Female Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had sex with a woman (vaginal or anal intercourse)	Yes	164/360 (45.6)	44.1 (38.7, 49.5)
	Rather not say	1/361 (0.3)	-
Had a female sexual partner in the past 12 months	Yes	129/162 (79.6)	80.7 (73.9, 87.5)
	Rather not say	2/164 (1.2)	-
Had vaginal sex with a female sex worker in the past 12 months		58/129 (45.0)	45.9 (36.4, 55.9)
Had a regular female sexual partner in the past 12 months		95/129 (73.6)	75.9 (68.8, 83.8)
Frequency of condom use with female sexual partners in the past 12 months	Every time	115/127 (90.6)	92.9 (89.1, 96.7)
	Almost every time	2/127 (1.6)	1.4 (0.0, 3.0)
	Sometimes	3/127 (2.4)	1.5 (0.1, 2.9)
	Never	7/127 (5.5)	4.2 (1.1, 7.2)
	Rather not say	2/129 (1.6)	-
Condom use at last sex with a female partner	Yes	124/153 (81.0)	85.2 (80.6, 91.3)
	No	29/153 (19.0)	14.8 (8.7, 19.4)
	Don't Remember	1/164 (0.6)	-
	Rather not say	10/164 (6.1)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Condom use at last sex with a female sex worker	Yes	51/55 (92.7)	94.9 (91.6, 99.4)
	No	4/55 (7.3)	5.1 (0.6, 8.4)
	Don't Remember	3/58 (5.2)	-
HIV status of the last female partner	HIV-negative	83/155 (53.5)	54.8 (46.0, 63.5)
	HIV-positive	0/155 (0.0)	-
	I did not know / ask	72/155 (46.5)	45.2 (36.5, 53.9)
	Rather not say	9/164 (5.5)	-

### Use of Condoms and Lubricants

Very few (1.5%) of MSM in Galle have never heard of condoms. Among those who have, most (78.9%) also know where to obtain condoms. Specifically, MSM in Galle most often obtain condoms from government STD clinics (68.2%) and private pharmacies or chemists (22.5%). Most MSM in Galle find condoms to be affordable (91.2%). One in four MSM in Galle (26.7%) have ever heard of lubricants and among them, more than half use lubricants usually or always (33.7 and 31.3%, respectively). Most, however, as lubricant use glycerine (52.9%) or saliva/water (29.0%).

**Table 149: Use of condoms and lubricants**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of condoms		353/361 (97.8)	98.5 (97.5, 99.5)
Knows where to obtain condoms	Yes	289/352 (82.1)	78.9 (73.8, 84.1)
	Rather not say	1/353 (0.3)	-
Usually obtains condoms from: (multiple response)	Government clinic - STD clinic	185/289 (64.0)	68.2 (62.8, 73.6)
	Govt. clinic - Not STD clinic	1/289 (0.3)	0.5 (0.0, 1.6)
	Private clinic	1/289 (0.3)	0.4 (0.0, 1.0)
	Private pharmacy or chemist	76/289 (26.3)	22.5 (17.5, 27.4)
	Traditional healer/herbalist	0/289 (0.0)	-
	Neighbourhood market/stand	2/289 (0.7)	0.6 (0.0, 1.2)
	Friends	5/289 (1.7)	1.1 (0.4, 1.8)
	Sex partner/s	0/289	-
	Bar / Nightclub	0/289	-
	NGOs/ outreach service	33/289 (11.4)	8.9 (5.7, 12.4)
	Service station(s)	19/289 (6.6)	6.3 (4.2, 8.4)
I do not use condoms	6/289 (2.1)	1.5 (0.6, 2.5)	
Affordability of male condoms	Affordable	313/352 (88.9)	91.2 (88.3, 94.1)
	Somewhat affordable	17/352 (4.8)	4.2 (1.7, 6.7)
	Not affordable	2/352 (0.6)	0.6 (0.0, 1.4)
	Don't know	20/352 (5.7)	4.0 (2.4, 5.5)
	Rather not say	1/353 (0.3)	-
Ever heard of lubricants	Yes	91/324 (28.1)	26.7 (21.7, 31.8)
	Don't know	37/361 (10.2)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Frequency of lubricant use during vaginal or anal sex	Always	25/91 (27.5)	33.7 (17.9, 51.9)
	Usually	29/91 (31.9)	31.3 (18.3, 44.2)
	Sometimes	25/91 (27.5)	24.9 (10.4, 38.2)
	Rarely	3/91 (3.3)	1.8 (0.0, 3.5)
	Never	9/91 (9.9)	8.3 (1.8, 14.4)
Type of lubricant used (multiple response)	Glycerine	41/82 (50.0)	52.9 (40.4, 65.8)
	Saliva or water	23/82 (28.0)	29.0 (17.4, 40.7)
	Vaseline	11/82 (13.4)	16.6 (6.8, 26.8)
	Baby oil	9/82 (11.0)	8.2 (1.7, 14.7)
	Lotion	10/82 (12.2)	8.9 (3.6, 13.9)
	Other oil	2/82 (2.4)	1.4 (0.0, 2.9)
	Water-based	1/82 (1.2)	0.5 (0.0, 1.0)
	Silicone-based	3/82 (3.7)	1.6 (0.6, 2.6)
	Soap	0/82 (0.0)	-
	Whatever we get from peer educator(s), don't know what it is	18/82 (22.0)	17.0 (8.9, 24.8)
	Other	1/82 (1.2)	0.8 (0.0, 2.1)
Don't know	1/82 (1.2)	1.4 (0.0, 3.2)	

### Sexually Transmitted Infections

About three in four (77.3%) MSM in Galle have ever heard of diseases that can be transmitted sexually. With regard to recognizing and describing symptoms of an STI, most of them know only that itching in women and men (79.9 and 85.4%%, respectively) indicates a possible sexually transmitted infection. Very few had a symptom of a sexually transmitted infection (i.e., a discharge or genital ulcer (sore)) or received an STI diagnosis in the year preceding the survey (2.0 and 2.3%, respectively).

**Table 150: Sexually transmitted infections**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of diseases that can be transmitted sexually	Yes	270/343 (78.7)	77.3 (72.3, 82.3)
	Don't know	18/361 (5.0)	-
Can describe symptoms of sexually transmitted infections in women (multiple response)	1. Abdominal pain	12/270 (4.4)	3.5 (1.8, 5.2)
	2. Abnormal genital discharge	27/270 (10.0)	6.7 (4.4, 9.0)
	3. Burning pain on urination	42/270 (15.6)	17.4 (12.6, 22.0)
	4. Genital ulcers or sores	30/270 (11.1)	10.2 (6.6, 13.7)
	5. Swelling in groin area	25/270 (9.3)	8.0 (5.2, 10.8)
	6. Itching	206/270 (76.3)	79.9 (75.5, 84.2)
	Don't know any	12/270 (4.4)	3.9 (1.8, 5.9)
Symptoms mentioned (0-6)	0	12/270 (4.4)	3.9 (1.8, 5.9)
	1	184/270 (68.1)	69.9 (64.4, 75.4)
	2	65/270 (24.1)	23.2 (18.4, 28.1)
	3	8/270 (3.0)	2.9 (0.4, 5.4)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	4	1/270 (0.4)	0.2 (0.0, 0.3)
	5	0/270 (0.0)	-
	6	0/270 (0.0)	-
Can describe symptoms of sexually transmitted infections in men (multiple response)	1. Genital discharge	21/270 (7.8)	5.3 (3.4, 7.1)
	2. Burning pain on urination	28/270 (10.4)	10.2 (6.1, 14.2)
	3. Genital ulcers or sores	40/270 (14.8)	13.7 (9.5, 17.9)
	4. Swelling in groin area	17/270 (6.3)	4.7 (2.2, 7.3)
	5. Itching	225/270 (83.3)	85.4 (81.3, 89.6)
	Don't know any	10/270 (3.7)	4.0 (1.0, 6.9)
Symptoms mentioned (0-5)	0	10/270 (3.7)	4.0 (1.0, 6.9)
	1	198/270 (73.3)	76.2 (71.0, 81.5)
	2	54/270 (20.0)	16.5 (12.4, 20.6)
	3	7/270 (2.6)	3.1 (0.6, 5.7)
	4	1/270 (0.4)	0.2 (0.0, 0.3)
	5	0/270 (0.0)	-
Tested for sexually transmitted diseases in the past 3 months	Yes	88/356 (24.7)	23.5 (19.2, 27.8)
	Don't know	5/361 (1.4)	-
Received an STI diagnosis in the past 12 months		8/270 (3.0)	2.3 (1.0, 3.7)
Had a discharge or genital ulcer (sore) in the last 12 months	Yes	9/360 (2.5)	2.0 (0.9, 3.1)
	Don't know	1/361 (0.3)	-
Sought treatment <sup>1</sup>		8/9 (88.9)	-
Places where treatment was sought (multiple response) <sup>1</sup>	Government clinic - STD clinic	5/8 (62.5)	-
	Govt. clinic - Not STD clinic	0/8 (0.0)	-
	Private clinic	5/8 (62.5)	-
	Private pharmacy or chemist	0/8 (0.0)	-
	Traditional healer/herbalist	0/8 (0.0)	-
	I used medicine or herbs from home	0/8 (0.0)	-
Reasons for seeking treatment from that source (multiple response) <sup>1</sup>	Confidentiality	4/8 (50.0)	-
	Affordability	0/8 (0.0)	-
	Recommended by friend or acquaintance	4/8 (50.0)	-
	Quality and/or specialized care given at this place	0/8 (0.0)	-
	Knows the caregivers	1/8 (12.5)	-
	Known friendliness of the caregivers	1/8 (12.5)	-
	Proximity/location	0/8 (0.0)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Reasons for not seeking treatment (multiple response) <sup>1</sup>	Didn't know where to go for treatment	1/1 (100.0)	-
	Embarrassed or afraid to seek treatment	0/1 (0.0)	-
	Could not afford treatment	0/1 (0.0)	-
	Unable to get transportation	0/1 (0.0)	-
	Didn't think I needed it	0/1 (0.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Prevention Programs

Among MSM in Galle who had ever tested for HIV, a majority (96.0%) had told their counsellor/health care provider that they have sex with men at their last HIV testing. In addition, all of them were satisfied or very satisfied with the quality of services provided at the place where they received their last HIV test.

**Table 151: Contact with healthcare providers**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
<b>STI treatment</b>			
Told the healthcare provider that they have sex with men when the last treatment for any symptom of an STI or a diagnosis for an STI was received <sup>1</sup>		4/8 (50.0)	-
Satisfaction with how the healthcare provider treated them during this last visit <sup>1</sup>	Very satisfied	4/8 (50.0)	-
	Somewhat satisfied	4/8 (50.0)	-
	Not satisfied	0/8 (0.0)	-
<b>HIV testing</b>			
Told the counsellor/health care provider that they have sex with men when last HIV test was received		168/173 (97.1)	96.0 (92.8, 99.0)
Satisfaction with the quality of services provided at the place where the last HIV test was received	Very satisfied	150/173 (86.7)	88.8 (84.6, 93.6)
	Satisfied	23/173 (13.3)	11.2 (6.4, 15.4)
	A little satisfied	0/173 (0.0)	-
	Not satisfied	0/173 (0.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

In the year preceding the survey, very few (3.5%) MSM in Galle had sought medical care, with hardly any of them experiencing any difficulty getting medical care when they sought it.

**Table 152: Use of healthcare services in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sought medical care for any reason <sup>1</sup>		17/360 (4.7)	3.5 (2.0, 4.9)
Had difficulty getting medical care when they sought it <sup>1</sup>		1/17 (5.9)	-
Type of difficulty (multiple response) <sup>1</sup>	Too expensive	0/1 (0.0)	-
	Too far away	0/1 (0.0)	-
	Could not take time from work	0/1 (0.0)	-
	Long waiting times	1/1 (100.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

Fewer than one in ten (8.4%) of MSM in Galle have been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the three months preceding the survey. Among those who have, most have received condoms and lubricants (71.0%), or counselling on condom use and safe sex (65.1%). In addition, one in three (23.5%) MSM in Galle has tested for an STI in the three months preceding the survey. Coverage by HIV prevention programs, defined as receipt of at least two interventions (i.e., Given condoms and lubricant; Counselling on condom use and safe sex; Received an STI test) in the past three months, is low, at 4.7%.

**Table 153: Coverage of HIV prevention programs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the past 3 months	Yes	38/355 (10.7)	8.4 (5.8, 10.9)
	Don't know	6/361 (1.7)	-
Services received	General HIV/STI prevention/ transmission information	14/38 (36.8)	35.6 (21.7, 49.2)
	Condoms and lubricants	27/38 (71.1)	71.0 (58.1, 84.1)
	Referral for STI treatment	1/38 (2.6)	1.8 (0.0, 4.5)
	Referral for VCT	0/38 (0.0)	-
	Counselling on condom use and safe sex	23/38 (60.5)	65.1 (51.3, 78.8)
Tested for sexually transmitted diseases in the past 3 months	Yes	88/356 (24.7)	23.5 (19.2, 27.8)
	Don't know	5/361 (1.4)	-
3.7C Coverage of HIV prevention programs <sup>1</sup>		22/361 (6.1)	4.7 (2.8, 6.5)

<sup>1</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Tested for sexually transmitted diseases in the past 3 months)

### Experiences of Discrimination and Violence on the basis of being an MSM

Very few MSM in Galle have been refused health care (0.2%) and none have been refused police assistance on the basis of being an MSM. Prevalence of verbal, physical, and sexual violence against them is also low, with 1.5% having experienced verbal insults, 0.2% having experienced physical violence and 0.2% having been sexually assaulted or raped.

**Table 154: Experiences of Discrimination and Violence on the basis of being an MSM**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Refused health care	Yes	1/358 (0.3)	0.2 (0.0, 0.4)
	Don't know	3/361 (0.8)	-
Refused police assistance		0/361 (0.0)	-
Verbally insulted	Yes	10/358 (2.8)	1.5 (0.8, 2.2)
	Don't know	3/361 (0.8)	-
Hit, kicked, or beaten	Yes	2/360 (0.6)	0.2 (0.1, 0.4)
	Don't know	1/361 (0.3)	-
Sexually assaulted or raped	Yes	1/359 (0.3)	0.2 (0.0, 0.5)
	Don't know	2/361 (0.6)	-
Sexual assailant/rapist	Stranger	0/1 (0.0)	-
	Social acquaintance	0/1 (0.0)	-
	Family/relative	1/1 (100)	-
	Police	0/1 (0.0)	-
	Paying sexual partner (Client)	0/1 (0.0)	-
	Non-paying partner or boyfriend/girlfriend	0/1 (0.0)	-
Sought medical treatment for sexual assault/rape		0/1 (0.0)	-
Reported sexual assault/rape to the police		0/1 (0.0)	-

### Use of Alcohol and Drugs

A majority of MSM in Galle (71.8%) have ever had a drink containing alcohol, and among those who have, most have a drink containing alcohol less than once a week (56.0%).

**Table 155: Alcohol consumption**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had a drink containing alcohol	Yes	254/360 (70.6)	71.8 (67.4, 76.2)
	Don't know	1/361 (0.3)	-
Alcohol consumption in the past month	I never drink alcohol	2/254 (0.8)	0.8 (0.0, 1.9)
	At least once a week	75/254 (29.5)	29.9 (23.7, 36.1)
	Less than once a week	151/254 (59.4)	56.0 (49.0, 62.3)
	Never in the past month	19/254 (7.5)	9.8 (4.9, 15.1)
	Every day	7/254 (2.8)	3.5 (1.8, 5.4)

Drug uses among MSM in Galle is low, with the consumption of cannabis having the highest prevalence among all the listed types of drugs (17.9% of MSM in Galle have used cannabis in the year before the survey). Hardly any MSM in Galle have ever injected drugs for non-medical purposes.

**Table 156: Use of non-prescribed/illicit drugs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of drug used			
Heroin	<i>Frequency of consumption</i>		
	Have never used	315/326 (96.6)	96.7 (95.2, 98.4)
	Never in the past 12 months	0/326 (0.0)	-
	Monthly or less	0/326 (0.0)	-
	Several times a month	0/326 (0.0)	-
	Two to four times a month	1/326 (0.3)	0.5 (0.0, 1.2)
	Two to three times a week	0/326 (0.0)	-
	Four or more times a week	1/326 (0.3)	0.1 (0.0, 0.2)
	Don't know <sup>1</sup>	9/326 (2.8)	1.7 (1.2, 4.1)
Rather not say	35/361 (9.7)	-	
Cannabis	<i>Frequency of consumption</i>		
	Have never used	257/328 (78.4)	80.5 (76.4, 84.6)
	Never in the past 12 months	0/328 (0.0)	-
	Monthly or less	3/328 (0.9)	0.9 (0.1, 1.7)
	Several times a month	14/328 (4.3)	4.1 (2.2, 6.0)
	Two to four times a month	16/328 (4.9)	4.8 (2.3, 7.2)
	Two to three times a week	23/328 (7.0)	5.8 (3.3, 8.1)
	Four or more times a week	7/328 (2.1)	2.3 (0.4, 4.2)
	Don't know <sup>1</sup>	8/328 (2.4)	1.7 (0.8, 2.6)
Rather not say	33/361 (9.1)	-	
Cocaine	<i>Frequency of consumption</i>		
	Have never used	305/323 (94.4)	95.2 (92.9, 97.5)
	Never in the past 12 months	0/323 (0.0)	-
	Monthly or less	0/323 (0.0)	-
	Several times a month	0/323 (0.0)	-
	Two to four times a month	0/323 (0.0)	-
	Two to three times a week	0/323 (0.0)	-
	Four or more times a week	0/323 (0.0)	-
	Don't know <sup>1</sup>	180/323 (5.6)	4.8 (2.5, 7.1)
Rather not say	38/361 (10.5)	-	
Ecstasy	<i>Frequency of consumption</i>		
	Have never used	302/324 (93.2)	94.4 (92.3, 96.7)
	Never in the past 12 months	0/324 (0.0)	-
	Monthly or less	0/324 (0.0)	-
	Several times a month	0/324 (0.0)	-
	Two to four times a month	1/324 (0.3)	0.2 (0.0, 0.5)
	Two to three times a week	1/324 (0.3)	0.5 (0.0, 1.1)
	Four or more times a week	0/324 (0.0)	-
	Don't know <sup>1</sup>	20/324 (6.2)	4.9 (2.7, 7.0)
Rather not say	37/361 (10.2)	-	
Amphetamines	<i>Frequency of consumption</i>		
	Have never used	300/324 (92.6)	94.2 (91.9, 96.5)
	Never in the past 12 months	0/324 (0.0)	-
	Monthly or less	0/324 (0.0)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Several times a month	0/324 (0.0)	-
	Two to four times a month	1/324 (0.3)	0.2 (0.0, 0.5)
	Two to three times a week	0/324 (0.0)	-
	Four or more times a week	0/324 (0.0)	-
	Don't know <sup>1</sup>	23/324 (7.1)	5.6 (3.3, 7.9)
	Rather not say	37/361 (10.2)	-
Opium	<i>Frequency of consumption</i>		
	Have never used	301/324 (92.9)	93.8 (91.2, 96.5)
	Never in the past 12 months	0/324 (0.0)	-
	Monthly or less	0/324 (0.0)	-
	Several times a month	0/324 (0.0)	-
	Two to four times a month	0/324 (0.0)	-
	Two to three times a week	0/324 (0.0)	-
	Four or more times a week	0/324 (0.0)	-
	Don't know <sup>1</sup>	23/324 (7.1)	6.2 (3.5, 8.8)
	Rather not say	37/361 (10.2)	-
Hashish	<i>Frequency of consumption</i>		
	Have never used	304/323 (94.1)	95.3 (93.0, 97.6)
	Never in the past 12 months	1/323 (0.3)	0.1 (0.0, 0.3)
	Monthly or less	1/323 (0.3)	0.1 (0.0, 0.3)
	Several times a month	0/323 (0.0)	-
	Two to four times a month	0/323 (0.0)	-
	Two to three times a week	0/323 (0.0)	-
	Four or more times a week	0/323 (0.0)	-
	Don't know <sup>1</sup>	17/323 (0.3)	4.4 (2.2, 6.6)
	Rather not say	38/361 (10.5)	-
Other drugs	<i>Frequency of consumption</i>		
	Have never used	292/357 (81.8)	80.4 (75.8, 85.0)
	Never in the past 12 months	0/357 (0.0)	-
	Monthly or less	1/357 (0.3)	0.8 (0.0, 2.3)
	Several times a month	5/357 (1.4)	1.4 (0.4, 2.4)
	Two to four times a month	11/357 (3.1)	4.3 (1.6, 7.1)
	Two to three times a week	27/357 (7.6)	7.7 (4.8, 10.6)
	Four or more times a week	10/357 (2.8)	2.6 (1.1, 4.1)
	Don't know <sup>1</sup>	11/357 (3.1)	2.8 (1.3, 4.2)
	Rather not say	4/361 (1.1)	-

<sup>1</sup> For each of the type of drug there is a significant proportion of the response 'Don't know.' Although it is possible that it refers to not knowing the frequency of drug use, it is more likely that it indicates never have heard of the particular type of drug.

**Table 157: Use of non-prescribed/illicit drugs by injection**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever injected drugs for non-medical purposes	Yes	1/334 (0.3)	0.2 (0.0, 0.5)
	Don't know	26/361 (7.2)	-
	Rather not say	1/361 (0.3)	-
Ever used non-sterile injecting equipment when injecting drugs <sup>1</sup>		1/1 (100.0)	-
Safe injecting practice <sup>1,2</sup>		1/1 (100.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses. <sup>2</sup> % Used a sterile needle and syringe at last injection

**Table 158: Use of non-prescribed/illicit drugs by injection in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Injected drugs for non-medical purposes in the past 12 months <sup>1</sup>		1/1 (100.0)	-
Frequency of injecting drugs <sup>1</sup>	Monthly or less	1/1 (100.0)	-
	Two to four times a month	0/1 (0.0)	-
	Two to three times a week	0/1 (0.0)	-
	Four or more times a week	0/1 (0.0)	-
Type of drug that was injected (multiple response) <sup>1</sup>	1. Heroin	1/1 (100)	-
	2. Cocaine	0/1 (0.0)	-
	3. Crack cocaine	0/1 (0.0)	-
	4. Churus/Ash	0/1 (0.0)	-
	5. Meth/amphetamine	0/1 (0.0)	-
	6. Ganja Mal	0/1 (0.0)	-
	7. Methadone	0/1 (0.0)	-
	8. Kerala Ganja	0/1 (0.0)	-
	9. Ganja	0/1 (0.0)	-
	10. Sudol (tablet)	0/1 (0.0)	-
	11. Rifernol (tablet)	0/1 (0.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Media

Regarding media use, MSM in Galle most frequently watch TV (most days or every day: 88.4%) or surf the Internet (most days or every day: 75.6%). Much fewer also listen to the radio (most days or every day: 30.2%) or read the newspaper (most days or every day: 6.8%). Although Internet use is

high, only 13.9% of MSM in Galle use the Internet to find sexual partners. Finally, almost all (99.3%) MSM in Galle have a mobile phone.

**Table 159: Use of media in the past 30 days**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Radio	Never	226/361 (62.6)	65.5 (60.5, 70.5)
	Once a month	6/361 (1.7)	1.2 (0.5, 1.9)
	Once a week	13/361 (3.6)	2.7 (1.4, 3.9)
	Most days	96/361 (26.6)	24.9 (20.4, 29.5)
	Every day	19/361 (5.3)	5.3 (3.3, 7.2)
	Don't know	1/361 (0.3)	0.4 (0.0, 1.0)
TV	Never	13/361 (3.6)	3.5 (1.9, 5.2)
	Once a month	6/361 (1.7)	1.6 (0.4, 2.7)
	Once a week	22/361 (6.1)	6.5 (3.6, 9.5)
	Most days	172/361 (47.6)	46.7 (41.6, 51.8)
	Every day	148/361 (41.0)	41.7 (36.6, 46.8)
Newspaper	Never	309/356 (86.8)	87.9 (84.7, 91.3)
	Once a month	6/356 (1.7)	1.4 (0.3, 2.5)
	Once a week	12/356 (3.4)	3.8 (1.8, 5.8)
	Most days	27/356 (7.6)	6.4 (3.8, 9.0)
	Every day	2/356 (0.6)	0.4 (0.0, 0.9)
	Rather not say	5/361 (1.4)	-
Internet	Never	91/361 (25.2)	24.0 (19.4, 28.5)
	Once a month	2/361 (0.6)	0.5 (0.0, 0.9)
	Once a week	0/361 (0.0)	-
	Most days	89/361 (24.7)	22.9 (18.5, 27.3)
	Every day	179/361 (49.6)	52.7 (46.8, 58.6)
Uses Internet to find sexual partners	Never	307/361 (85.0)	86.1 (82.3, 90.0)
	Once a month	18/361 (5.0)	5.5 (2.7, 8.3)
	Once a week	6/361 (1.7)	1.3 (0.2, 2.4)
	Most days	27/361 (7.5)	6.4 (3.7, 9.1)
	Every day	3/361 (0.8)	0.7 (0.0, 1.4)
Has a mobile phone		358/361 (99.2)	99.3 (98.8, 100.0)

### Multiplier questions

In May, June or July of 2017, 26.9% of MSM in Galle had received any services (educational leaflets, condoms, HIV counselling) from the NGO Sathya Guna Foundation. About the same proportion (27.1%) have received condoms from the same NGO and 22.3% were escorted by NGO Sathya Guna Foundation's staff to an STI clinic. About one in five MSM in Galle (19.0%) received a purse by peer educators during their outreach work in November 2017. Finally, 4.5% of MSM in Galle participated in the first IBBS in Sri Lanka, implemented in 2014.

**Table 160: Multiplier questions**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Received any services (educational leaflets, condoms, HIV counselling) from the NGO Sathya Guna Foundation in Galle in May, June or July 2017	Yes Don't know	91/338 (26.9) 23/361 (6.4)	26.9 (21.2, 32.7) -
Received condoms from the NGO Sathya Guna Foundation in Galle in May, June or July 2017	Yes Don't know	90/332 (27.1) 29/361 (8.0)	27.1 (21.2, 33.0) -
Escorted to an STI clinic by the staff of the NGO Sathya Guna Foundation in Galle in May, June or July 2017	Yes Don't know	77/344 (22.4) 17/361 (4.7)	22.3 (17.4, 27.3) -
Received a purse by peer educators (staff of the NGO Sathya Guna Foundation in Galle) in the week of 2 November - 7 November 2017 during their outreach work	Yes Don't know	60/347 (17.3) 14/361 (3.9)	19.0 (13.9, 24.0) -
Participated in the first IBBS in Sri Lanka in 2014 <sup>1</sup>	Yes	17/358 (4.7)	4.5 (2.4, 6.6)
	Don't know	3/361 (0.8)	-
	In Colombo	-	-
	In Galle	17/17 (100.0)	-
	In Anuradhapura	-	-

### 3. Summary results

#### 3.2 Men who have sex with men

##### 3.2.3 Anuradhapura

A total of 352 MSM respondents were recruited in Anuradhapura, including 2 seeds. For estimates, Gile's SS with population size estimate of 907 (358 low estimate and 1,456 high estimate) was used along with 0.95 confidence intervals, and 5,000 bootstraps. Across the tables presented below, because estimates based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

#### Homophily and Convergence

As mentioned in the previous sections, a homophily value of one means no homophily, while values above show the presence of positive homophily (e.g. people are recruiting similar to themselves), and values below 1 mean negative homophily (e.g. people are recruiting different from themselves). Amongst MSMs in Colombo, the homophily ranged from 0.79 to 1.08, overall this can be interpreted as weak homophily. Convergence was reached on all key indicators, with all population estimates becoming stable around the 300<sup>th</sup> participant. For age and income, populations estimates became stable already earlier during sampling, around the 150<sup>th</sup> participant.

**Table 161: Homophily analysis**

	<i>Target indicator</i>	<i>Recruitment homophily</i>	<i>Estimated population homophily</i>
1	HIV prevalence among MSM <sup>1</sup> (% HIV positive)	-	-
2	Active syphilis among MSM <sup>2</sup>	-	-
3	Viral hepatitis among MSM (HBV) <sup>2</sup>	-	-
4	HIV and hepatitis co-infection among MSM <sup>1</sup>	-	-
5	Knowledge of HIV status among MSM <sup>3</sup> (% Know HIV status from an HIV test)	1.00	1.32
6	Coverage of HIV prevention programs among MSM <sup>4</sup> (% Reached with HIV/AIDS prevention programs)	0.97	0.89
7	Condom use among MSM (% Used a condom the last time they had anal sex with a male partner)	1.08	1.09
8	Discriminatory attitudes towards PLHIV <sup>5</sup> (% who answer 'No' to at least one of the two questions)	1.00	0.79
9	Avoidance of HIV services because of stigma and discrimination among MSM <sup>6</sup> (% who answer 'Yes' to at least one of the reasons)	1.01	1.03
10	Age (% Mdn+)	1.02	1.01
11	Income (% 20,000 Rs.+)	0.98	1.01

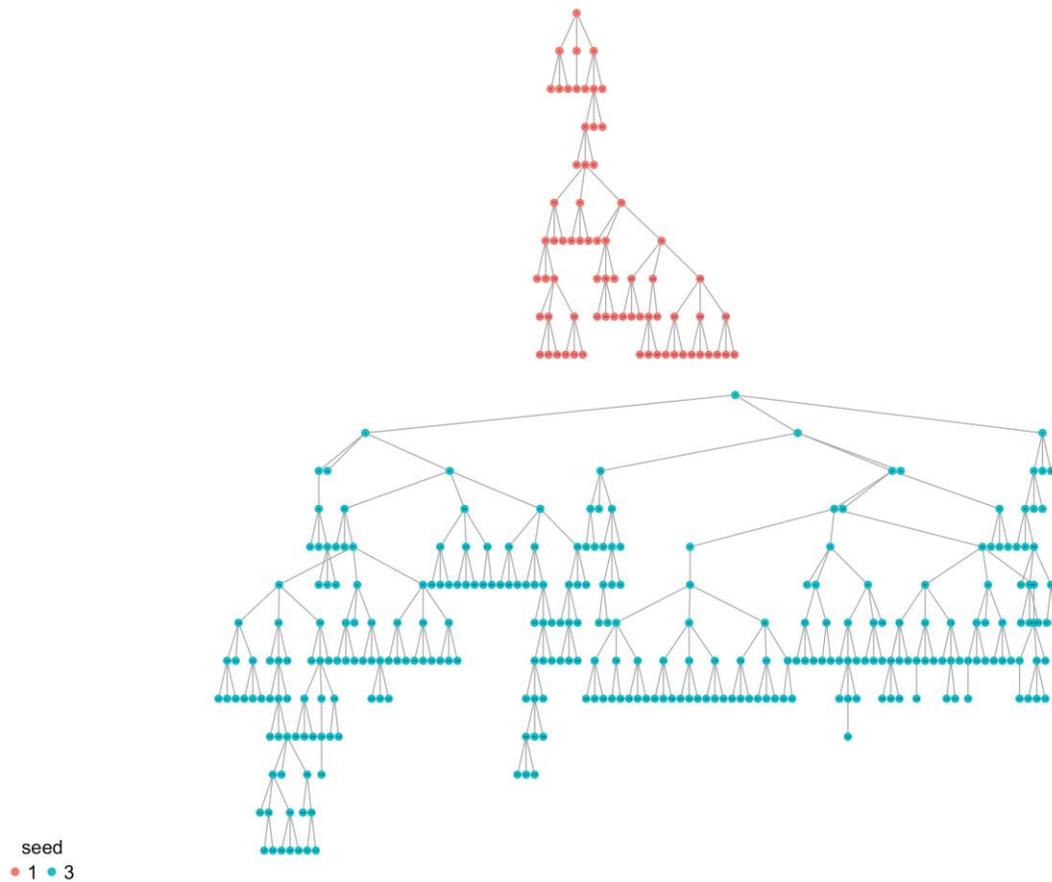
<sup>1</sup> Not calculated because there were not any positive cases. <sup>2</sup> Not calculated because there was one positive case. <sup>3</sup> Tested and positive or tested in the past 12 months and negative. <sup>4</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Tested for STI). <sup>5</sup> Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?; Do you think that children living with HIV should be able to attend school with children who are HIV negative? <sup>6</sup> Did not seek HIV testing/prevention/treatment services because of: Fear of or concern about stigma by staff or neighbours; Fear of or concern about or experienced violence; Fear of or concern about or experienced police harassment or arrest. This Global AIDS Monitoring indicator has changed. Please see Global AIDS Monitoring 2018, pg. 96.

\*  $p < 0.05$

### Recruitment

Recruitment started with two initial respondents (seeds), among which one was much more productive, accounting for the recruitment of 80.1% of the total sample. Through the other seed only 19.9% of the total sample was recruited.

**Figure 14. Recruitment tree – MSM Anuradhapura**



**Table 162: Recruitment information**

Characteristic	Response	Sample proportion n/N (%)
Main reason for participation	Interest in HIV and sexual health	98/352 (27.8)
	HIV test	224/352 (63.6)
	Interest in issues related to MSM	25/352 (7.1)
	Helping the community	3/352 (0.9)
	Friend wanted me to participate	2/352 (0.6)
	Someone forced me	0/352 (0.0)
	Incentive/Gift	0/352 (0.0)
Mode of receiving the coupon	Received the coupon from a friend/acquaintance	350/350 (100)
	Found the coupon laying around somewhere	0/350 (0.0)
	Bought or exchanged it for something	0/350 (0.0)
	Seed (from the IBBS office)	2/352 (0.6)
Acquaintances for:	< 6 months	117/352 (33.2)
	6 months - 1 year	33/352 (9.4)
	> 1 year	202/352 (57.4)
Screener's confidence that participant is MSM	Confident	348/352 (98.9)
	Somewhat confident	4/352 (1.1)

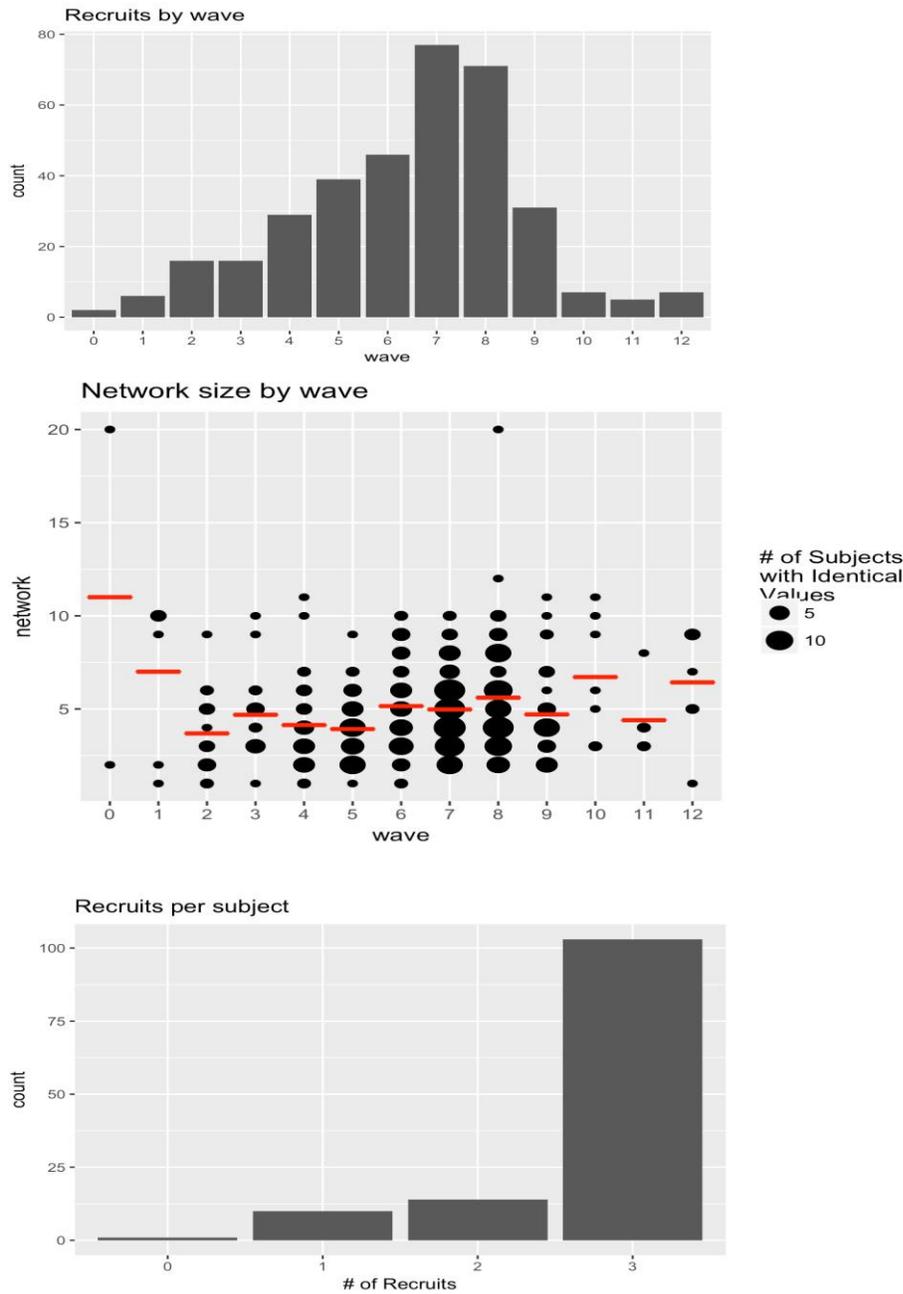
On average, study participants knew about eight other MSM. When asked how many of the MSM they knew who were at least 18 years of age, who lived in Anuradhapura, and who they have seen in the past one month, on average, study participants knew five other MSM.

**Table 163: Network size questions**

Characteristic	Sample statistics
How many men do you know (they know your name and you know theirs), who have had sex with men in the last 6 months?	<i>M</i> ( <i>SD</i> ) = 8.2 (4.98) Mdn = 7.0 Range = 2 - 50
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many are above the age of 18? <sup>1</sup>	<i>M</i> ( <i>SD</i> ) = 7.8 (4.80) Mdn = 7.0 Range = 1 - 47
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many live, work or study in ___ [city of survey]? <sup>1</sup>	<i>M</i> ( <i>SD</i> ) = 6.7 (4.01) Mdn = 6.0 Range = 1 - 35
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many have you seen in the past 1 month? <sup>1,2</sup>	<i>M</i> ( <i>SD</i> ) = 5.0 (2.65) Mdn = 4.0 Range = 1 - 20

<sup>1</sup> One respondent answered with zero. His answer was changed to one. <sup>2</sup> In the estimation of population frequencies and statistics, this question was used as the network size question.

**Figure 15. Recruitment diagnostics – MSM Anuradhapura**



A total of twelve waves were reached among MSM in Anuradhapura, with the majority of respondents recruited in waves six, seven, and eight. Although there is a tendency for the average network size to lessen in subsequent waves, the decrease was not fully observed. Overall, however, the average network size ranges from 11 in wave zero to around 5 already after the second wave. Recruitment in Anuradhapura went well, with a majority of study participants recruiting in the study three other MSM.

## Biological Indicators

Among MSM in Anuradhapura there were not any cases positive for HIV. Prevalence of active syphilis and hepatitis B is also low, at 0.3 and 0.2%, respectively.

**Table 164: Biological test results**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Positive for HIV		0/352 (100)	-
Positive for syphilis (VDRL)		1/352 (0.3)	0.3 (0.0, 0.6)
Positive for syphilis (TPPA)		1/352 (0.3)	0.3 (0.0, 0.6)
Positive for syphilis (onsite testing)		1/352 (0.3)	0.3 (0.0, 0.6)
Positive for hepatitis B surface antigen		1/352 (0.3)	0.2 (0.0, 0.5)
HIV and hepatitis co-infection		0/352 (100)	-

## Socio-Demographic Characteristics

All MSM in Anuradhapura were born in Sri Lanka and have Sri Lankan citizenship. District of residence in the past year has for a majority of them was Anuradhapura (99.7%).

**Table 165: Citizenship and Residence**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Citizenship	Sri Lankan	352/352 (100)	-
Country of birth	Sri Lanka	352/352 (100)	-
District of residence in the past year	Anuradhapura	352/352 (100)	-
	Other	0/352 (0.0)	-
Primary residence is Anuradhapura		351/352 (99.7)	99.7 (99.2, 100)

Mean age of MSM in Anuradhapura is 36.7 years, with close to half (46.4%) younger than 35 years of age. With regard to ethnicity and language spoken at home, almost all (97.9 and 99.3%, respectively) of MSM in Anuradhapura are Sinhalese. Almost all MSM in Anuradhapura can read and write (96.2%) and very few have never attended formal education (2.8%). Although close to half (45.2%) of MSM in Anuradhapura are in paid work, and another third of them work occasionally (33.3%), a majority of MSM in Anuradhapura earn only 20,000-30,000 Sri Lankan Rupees per month (127-194 USD).

**Table 166: Core socio-demographic indicators**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age	Sample <i>M (SD)</i> = 37.5 (12.26) Mdn = 36.0 <i>N</i> =352 Range = 18 - 74	Pop. est. <i>M (SD)</i> = 36.7 (11.82) Mdn = 36.0 - -	-	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Age groups	18 – 24	55/352 (15.6)	15.9 (12.5, 19.4)
	25 – 34	99/352 (28.1)	30.5 (25.8, 35.3)
	35 – 44	109/352 (30.9)	30.7 (26.5, 34.9)
	≥ 45	89/352 (25.3)	22.9 (18.8, 26.9)
Sex	Man	351/352 (99.7)	99.5 (98.8, 100)
	TGW	1/352 (0.3)	0.5 (0.0, 1.2)
Sex same as at birth		351/352 (99.7)	99.5 (98.8, 100)
Ethnicity	Sinhalese	346/352 (98.3)	97.9 (96.2, 99.7)
	Sri Lankan Tamil	5/352 (1.4)	1.9 (0.1, 3.6)
	Indian Tamil	1/352 (0.3)	0.1 (0.0, 0.4)
	Moor/Muslim	0/352 (0.0)	-
	Burgher	0/352 (0.0)	-
	Malay	0/352 (0.0)	-
	Other	0/352 (0.0)	-
Languages spoken at home (multiple response)	Sinhalese	349/352 (99.1)	99.3 (98.8, 99.9)
	Tamil	6/352 (1.7)	1.9 (0.4, 3.6)
	English	0/352 (0.0)	-
	Other	0/352 (0.0)	-
Can read and write	Yes	334/352 (94.9)	96.2 (94.9, 97.5)
	No	18/352 (5.1)	3.7 (2.5, 5.1)
Completed level of education	Never attended school	12/352 (3.4)	2.8 (1.6, 3.9)
	Grade 1-5	21/352 (5.9)	5.8 (3.4, 8.3)
	Grade 6-10	52/352 (14.8)	13.8 (10.2, 17.4)
	Passed O/L	182/352 (51.7)	52.0 (47.0, 57.0)
	Passed A/L	77/352 (21.9)	23.3 (18.9, 27.7)
	Completed Diploma	5/352 (1.4)	1.5 (0.4, 2.7)
	Completed Degree	3/352 (0.9)	0.7 (0.0, 1.4)
Main activity	In paid work (including parental or other leave)	154/352 (43.8)	45.2 (40.6, 49.7)
	Occasional work	129/352 (36.6)	33.3 (29.1, 37.6)
	In unpaid or voluntary work	0/352 (0.0)	-
	Unemployed	41/352 (11.6)	13.8 (9.8, 17.8)
	Student	2/352 (0.6)	0.9 (0.0, 2.0)
	Retired	16/352 (4.5)	3.9 (2.2, 5.6)
	Other	10/352 (2.8)	2.8 (1.2, 4.3)
Income	< 5,000 Rupees	4/352 (1.1)	1.4 (0.2, 2.6)
	5,000-10,000	13/352 (3.7)	4.2 (2.2, 6.3)
	10,001-20,000	80/352 (22.7)	21.8 (17.9, 25.7)
	20,001-30,000	157/352 (44.6)	45.6 (41.0, 50.2)
	30,001-40,000	84/352 (23.9)	22.1 (18.5, 25.6)
	> 40,000 Rupees	13/352 (3.7)	4.3 (1.7, 6.9)
	Don't know	1/352 (0.3)	0.5 (0.0, 1.0)

Two-thirds of MSM in Anuradhapura live in their own home (68.6%). On average, MSM in Anuradhapura live with three other people, and more than half (56.0%) share their household with at least one child. Over half of MSM in Anuradhapura are living with their partner/spouse (60.9%). Among those who are in a relationship/marriage, most (71.1%) of MSM in Anuradhapura are in a relationship with a woman.

**Table 167: Household information and family life**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of residence	Temporary shelter	10/352 (2.8)	2.6 (1.3, 3.9)
	Boarding house	5/352 (1.4)	1.3 (0.3, 2.2)
	Parents' home	96/352 (27.3)	27.6 (23.4, 31.9)
	My own home	241/352 (68.5)	68.6 (64.2, 72.8)
	Lodging	0/352 (0.0)	-
	On the street	0/352 (0.0)	-
	Brothel	0/352 (0.0)	-
	Other	0/352 (0.0)	-
Number of household members	Sample <i>M (SD)</i> = 3.7 (1.25) Mdn = 4.0 <i>N</i> = 352 Range = 1 - 8	Pop. est. <i>M (SD)</i> = 3.7 (1.25) Mdn = 4.0 - -	- -
Number of children currently living in the household	No children	159/352 (45.2)	44.0 (39.1, 49.1)
	One	87/352 (24.7)	25.5 (20.9, 30.0)
	Two	84/352 (23.9)	24.9 (20.5, 29.2)
	Three or more	22/352 (6.3)	5.6 (3.7, 7.5)
Number of children <sup>1</sup>	No children	124/351 (35.3)	38.1 (33.1, 43.2)
	One	84/351 (23.9)	23.6 (19.5, 27.7)
	Two	102/351 (29.1)	27.2 (23.1, 31.3)
	Three or more	41/351 (11.7)	11.1 (8.1, 14.1)
Marital status	Single (Never married)	127/352 (36.1)	40.1 (35.2, 44.9)
	Married	216/352 (61.4)	58.0 (53.2, 62.9)
	Divorced/Separated	8/352 (2.3)	1.7 (0.8, 2.6)
	Widowed	1/352 (0.3)	0.1 (0.0, 0.3)
Cohabitation	Living together with a partner/spouse	222/352 (63.1)	60.9 (55.6, 66.2)
	Involved in a relationship without living together	104/352 (29.5)	29.2 (24.7, 33.7)
	Have no relationship/Do not have a partner	26/352 (7.4)	9.8 (5.9, 13.8)
Sex of partner	Woman	237/323 (73.4)	71.7 (66.7, 76.6)
	Man	86/323 (26.6)	28.3 (23.4, 33.4)
	Rather not say	3/326 (0.9)	-
Self-identifies as: (multiple response)	MSM (gay man)	270/352 (76.7)	77.9 (74.2, 81.6)
	Nachchi	26/352 (7.4)	6.7 (4.4, 8.9)
	Male sex worker	45/352 (12.8)	11.9 (9.1, 14.7)
	Transgender woman	1/352 (0.3)	0.5 (0.0, 1.1)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Other MSM	15/352 (4.3)	4.5 (2.6, 6.4)

<sup>1</sup> One person reported they were a parent or guardian of 21 children. His answer was treated as non-response.

About one-fifth of MSM in Anuradhapura have never heard of HIV/AIDS (18.6%). Among those who have, close to half (44.6%) have received the most thorough information about HIV/AIDS from NGOs. Among MSM in Anuradhapura who have heard of HIV/AIDS, over half (59.3%) have never discussed HIV/AIDS with any of their partners.

## HIV and AIDS

**Table 168: General knowledge about HIV/AIDS**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has heard of HIV/AIDS	Yes	289/352 (82.1)	81.4 (77.4, 85.4)
	No	63/352 (17.9)	18.6 (14.6, 22.6)
Main source of the most thorough understanding of HIV/AIDS	School	4/289 (1.4)	1.0 (0.3, 1.7)
	Health services	31/289 (10.7)	12.5 (8.0, 17.2)
	Workplace	20/289 (6.9)	6.4 (3.6, 9.3)
	Friends/Family	4/289 (1.4)	1.2 (0.2, 2.1)
	Television	15/289 (5.2)	5.7 (2.9, 8.5)
	Newspaper/Magazines	32/289 (11.1)	11.9 (7.6, 16.3)
	Posters/Billboards	18/289 (6.2)	5.3 (2.8, 7.6)
	Pamphlets/Leaflets	27/289 (9.3)	9.2 (5.5, 12.9)
	Radio	4/289 (1.4)	1.7 (0.0, 3.4)
	NGOs	133/289 (46.0)	44.6 (37.5, 51.6)
Other	1/289 (0.3)	0.4 (0.0, 1.2)	
Discussed HIV with any sexual partner	Yes, all	25/289 (8.7)	8.2 (5.3, 11.2)
	Yes, some	85/289 (29.4)	31.2 (25.6, 37.2)
	No, none	176/289 (60.9)	59.3 (52.7, 65.7)
	Don't Know	3/289 (1.0)	1.1 (0.0, 2.3)
Partner ever disclosed their HIV status	Yes, all	15/109 (13.6)	13.6 (5.9, 21.1)
	Yes, some	72/109 (65.5)	65.9 (55.8, 76.1)
	No, none	20/109 (18.2)	19.0 (10.4, 27.8)
	Don't Know	2/109 (1.8)	1.5 (0.0, 3.6)
	Rather not say	1/110 (0.9)	-
Knows somebody who is HIV-positive or has died of AIDS	Yes	48/289 (16.6)	16.5 (12.3, 20.8)
	No	241/289 (83.4)	83.5 (79.3, 87.7)
Close friend or relative died of AIDS	Yes, close relative	1/289 (0.3)	0.4 (0.0, 1.2)
	Yes, close friend	2/289 (0.7)	0.7 (0.1, 1.3)
	No	285/289 (98.6)	98.6 (97.6, 99.7)
	Don't Know	1/289 (0.3)	0.2 (0.0, 0.6)

A majority of MSM in Anuradhapura perceive their personal HIV risk as low or none (85.2%) because they always use condoms (57.3%) and trust their partners (56.4%).

**Table 169: Perception of personal HIV risk**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Personal HIV risk	No risk	288/352 (81.8)	83.1 (79.7, 86.6)
	Low risk	9/352 (2.6)	2.1 (0.9, 3.4)
	Moderate risk	6/352 (1.7)	1.5 (0.5, 2.4)
	High risk	0/352 (0.0)	-
	Don't know	49/352 (13.9)	13.2 (10.0, 16.3)
Reasons for perceiving the risk as moderate or high (multiple response) <sup>1</sup>	Many sexual partners	5/6 (83.3)	-
	Didn't always use condoms	3/6 (50.0)	-
	Injected drugs	0/6 (0.0)	-
	Partner has other partners	0/6 (0.0)	-
	Don't know	1/6 (16.7)	-
Reasons for perceiving no or low risk (multiple response)	Trust my partner/s	126/294 (42.9)	56.4 (50.1, 62.5)
	Always use condoms	173/294 (58.8)	57.3 (51.4, 63.3)
	Don't know	41/294 (13.9)	15.1 (11.1, 19.1)
	Rather not say	3/297 (1.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

Knowledge about HIV prevention is somewhat high among MSM in Anuradhapura, with two-thirds (59.7%) being able to correctly identify modes of sexual transmission of HIV and reject major misconceptions about transmission HIV. When looking at specific items that that the composite indicator consists of, most of MSM in Anuradhapura know that the risk of getting HIV can be reduced by using a condom every time one has sex (77.6%) and that a healthy-looking person can have HIV (75.3%). Somewhat fewer also know that a person cannot get HIV from mosquito bites (67.3%).

**Table 170: GAM 5.1 Knowledge about HIV prevention, disaggregated by age**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners	<u>Among all</u> Yes	263/352 (74.4)	75.7 (71.5, 79.8)
	<u>Among those aged 18 - 24</u> Yes	45/55 (81.8)	80.9 (67.8, 93.4)
Person can reduce the risk of getting HIV by using a condom every time he/she has sex	<u>Among all</u> Yes	273/352 (77.6)	78.0 (74.1, 82.0)
	<u>Among those aged 18 - 24</u> Yes	49/55 (89.1)	86.9 (73.9, 98.8)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Healthy-looking person can have HIV	<u>Among all</u> Yes	265/352 (75.3)	75.0 (70.9, 79.2)
	<u>Among those aged 18 – 24</u> Yes	46/55 (89.1)	77.1 (63.7, 87.3)
Person cannot get HIV from mosquito bites	Among all No	237/352 (67.3)	67.6 (63.3, 71.9)
	<u>Among those aged 18 – 24</u> No	42/55 (76.4)	74.7 (62.1, 86.8)
Person cannot get HIV by sharing food with someone who is infected	<u>Among all</u> No	242/352 (68.8)	69.2 (64.7, 73.7)
	<u>Among those aged 18 – 24</u> No	46/55 (83.6)	81.5 (68.2, 93.6)
Composite indicator for knowledge about HIV prevention (1-5 <sup>1</sup> )	<u>Among all</u> # of correct answers		
	None	72/352 (20.5)	20.5 (16.6, 24.3)
	One	6/352 (1.7)	1.2 (0.5, 2.0)
	Two	5/352 (1.4)	1.1 (0.4, 1.8)
	Three	23/352 (6.5)	6.3 (4.1, 8.5)
	Four	35/352 (9.9)	11.1 (7.7, 14.5)
	Five	211/352 (59.9)	59.7 (55.0, 64.5)
	<u>Among those aged 18 - 24</u> # of correct answers		
	None	5/55 (9.1)	12.2 (13.0, 13.0)
	One	2/55 (3.6)	3.0 (0.0, 6.5)
	Two	1/55 (1.8)	1.4 (0.0, 5.8)
	Three	3/55 (5.5)	4.5 (0.0, 10.4)
Four	5/55 (9.1)	12.6 (2.3, 24.6)	
Five	39/55 (70.9)	66.3 (53.6, 76.6)	
HIV can be transmitted from mother to her unborn child	Yes	286/352 (81.3)	79.4 (75.1, 83.7)
Ever heard of ART	Yes	165/352 (46.9)	45.3 (40.7, 49.9)

<sup>1</sup> Don't know is recorded as incorrect. Numerator for individual and the composite indicator excludes those who have never heard of HIV/AIDS, while all who had a valid answer to the question regarding whether they had ever heard of HIV/AIDS are included in the denominator.

Among MSM in Anuradhapura who have ever heard of HIV/AIDS, few (14.1%) exhibit a discriminatory attitude towards PLHIV, with somewhat more saying that they would not buy fresh vegetables from a shopkeeper or vendor if she knew that this person had HIV (13.6%%) than saying that they think children living with HIV should not be able to attend school with children who are HIV negative (7.8%%).

**Table 171: GAM 4.1 Discriminatory attitudes towards PLHIV, disaggregated by age**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Thinks that children living with HIV should be able to attend school with children who are HIV negative	<u>Among all</u>		
	Yes	266/286 (93.0)	92.2 (89.0, 95.4)
	No	20/286 (7.0)	7.8 (4.6, 11.0)
	Don't Know/Not sure/It depends	3/289 (1.0)	1.1 (0.0, 2.1)
	<u>Among those aged 18-49</u>		
	Yes	225/241 (93.4)	92.5 (89.2, 95.9)
	No	16/241 (6.6)	7.5 (4.1, 10.8)
	Don't know/Not sure/It depends	3/244 (1.2)	1.2 (0.1, 2.4)
	<u>Among those aged 25-49 years</u>		
Yes	179/191 (93.7)	92.5 (88.4, 96.7)	
No	12/191 (6.3)	7.5 (3.3, 11.6)	
Don't know/Not sure/It depends	3/194 (1.5)	1.5 (0.0, 3.0)	
Would buy fresh vegetables from a shopkeeper or vendor if he/she knew that this person had HIV?	<u>Among all</u>		
	Yes	251/289 (86.9)	86.4 (82.3, 90.5)
	No	38/289 (13.1)	13.6 (9.5, 17.6)
	Don't Know/Not sure/It depends	0/289 (0.0)	-
	<u>Among those aged 18-49</u>		
	Yes	216/244 (88.5)	87.6 (83.5, 91.7)
	No	28/244 (11.5)	12.4 (8.3, 16.5)
	Don't know/Not sure/It depends	0/244 (0.0)	-
	<u>Among those aged 25-49 years</u>		
Yes	174/194 (89.7)	88.7 (84.1, 93.4)	
No	20/194 (10.3)	11.3 (6.6, 15.9)	
Don't know/Not sure/It depends	0/194 (0.0)	-	
Composite indicator for discriminatory attitudes towards PLHIV (1-2 <sup>1</sup> )	Responded 'No' to either of the two questions		
	<u>Among all</u>	40/289 (13.8)	14.1 (10.1, 18.2)
	<u>Among those aged 18-49</u>	30/244 (12.3)	13.0 (8.8, 17.2)
	<u>Among those aged 25-49</u>	22/194 (11.3)	12.0 (7.5, 16.5)

<sup>1</sup> Participants who responded don't know/not sure/it depends and those who refused to answer were excluded from the analysis. Numerator: Number of respondents who respond no to either of the two questions; Denominator: Number of all respondents who have heard of HIV.

Two-thirds (66.2%) of MSM in Anuradhapura know where to receive an HIV test, with a majority (86.0%) mentioning government STI clinic as a place that they know offers an HIV test. Although 16.7% of MSM in Anuradhapura have ever tested for HIV, as few as 3.6% of them have received an HIV test within 12 months before the survey was carried out. Among those who ever did receive an HIV test, half (46.2%) have received their last HIV test at a government non-STI clinic.

**Table 172: HIV testing**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Knows where to receive an HIV test	Yes	232/352 (65.9)	66.2 (61.4, 71.0)
	No	120/352 (34.1)	33.8 (29.0, 38.6)
Places that offer HIV testing (multiple response)	Government clinic – STI	200/232 (86.2)	86.0 (81.7, 90.3)
	Govt. clinic – non-STI	8/232 (3.4)	2.6 (1.1, 4.2)
	Private clinic	28/232 (12.1)	12.7 (8.4, 17.1)
	Private pharmacy or chemist	6/232 (2.6)	3.2 (0.8, 5.7)
	Traditional healer/herbalist	0/232 (0.0)	-
	Other (NGO)	9/232 (3.9)	3.6 (1.4, 5.7)
	Other	2/232 (0.9)	0.5 (0.0, 0.9)
	Don't know any	3/232 (1.3)	1.3 (0.0, 2.7)
Knows HIV status from an HIV test	No, I have never been tested	289/351 (82.3)	83.4 (80.0, 86.8)
	Yes, I have been tested	62/351 (17.7)	16.7 (13.2, 20.0)
	Rather not say	1/352 (0.3)	-
Last HIV test	< 6 months	7/62 (11.3)	10.4 (8.6, 11.5)
	6 – 12 months	7/62 (11.3)	12.7 (4.5, 21.7)
	> 12 Months	48/62 (77.4)	76.9 (68.3, 85.3)
Result of last HIV test	Negative	60/62 (96.8)	93.3 (88.6, 95.9)
	Positive	0/62 (0.0)	-
	Indeterminate	1/62 (1.6)	1.4 (0.8, 1.8)
	Didn't receive the result	0/62 (0.0)	-
	Don't know	1/62 (1.6)	5.3 (2.9, 9.7)
Composite indicator for knowledge of HIV status <sup>1</sup> (1-3)		13/351 (3.7)	3.6 (1.9, 5.3)
Last HIV test was voluntary	Yes	58/62 (93.5)	92.4 (86.4, 97.8)
	No	4/62 (6.5)	7.6 (2.2, 13.6)
Place where last HIV test was received	Government clinic – STI	15/62 (24.2)	23.4 (9.7, 43.8)
	Government clinic – non-STI	29/62 (46.8)	46.2 (26.7, 65.5)
	Private clinic	8/62 (12.9)	12.5 (1.7, 23.3)
	Private pharmacy or chemist	0/62 (0.0)	-
	Traditional healer/herbalist	0/62 (0.0)	-
	Other	10 <sup>2</sup> /62 (16.1)	14.9 (7.8, 21.6)

<sup>1</sup> Numerator: Number of respondents who tested HIV-positive or who tested in the past 12 months and the result was negative; Denominator: Number of respondents who provided a valid answer to the question about their knowledge about their HIV status from an HIV test. <sup>2</sup> At an NGO (8/10)

Among MSM in Anuradhapura who have never received an HIV test, a majority said it was because they always use condoms (42.7%) or because they do not think they at risk of HIV (37.2%). Many also said that it was because they do not know where to go to receive it (23.8%). About one in four (28.4%) of MSM in Anuradhapura avoid HIV services because of stigma and discrimination, namely due to fear or concern about or experienced violence (24.2%) or fear or concern about stigma by staff and neighbours (6.2%).

**Table 173: Reasons for never receiving an HIV test**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Reasons for never receiving an HIV test (multiple response)	Don't know where to go	72/289 (24.9)	23.8 (19.4, 28.1)
	I always use condoms	127/289 (43.9)	42.7 (37.4, 47.9)
	Not at risk of getting HIV	103/289 (35.6)	37.2 (31.8, 42.6)
	Didn't have time/Too busy	42/289 (14.5)	14.3 (10.8, 17.9)
	I trust my partner	67/289 (23.2)	22.0 (17.8, 26.2)
	Afraid of knowing I may be HIV-positive	16/289 (5.5)	5.7 (2.9, 8.5)
	Lack of confidentiality	9/289 (3.1)	2.9 (1.3, 4.6)
	Inconvenient testing location	20/289 (6.9)	6.0 (3.4, 8.6)
	No money	25/289 (8.7)	9.0 (5.7, 12.4)
Don't know	1/289 (0.3)	0.2 (0.0, 0.5)	
Never receiving an HIV test because of stigma and discrimination (multiple response)	Fear or concern about stigma by staff or neighbours	17/289 (5.9)	6.2 (3.6, 8.7)
	Fear of or concern about or experienced violence	72/289 (24.9)	24.2 (19.5, 28.7)
	Fear of or concern about or experienced police harassment or arrest	1/289 (0.3)	0.2 (0.0, 0.5)
Composite indicator for avoidance of HIV services because of stigma and discrimination (1-3)		84/289 (29.1)	28.4 (23.3, 33.4)

### Sexual Behaviour

Almost all MSM in Anuradhapura have ever had sex with a woman (94.9%). At first anal sex with a man, MSM in Anuradhapura were on average 21 years of age. Their first male partner was on average somewhat older, at 24 years of age. Finally, three in four (74.8%) MSM in Anuradhapura visit outdoor sites (such as parks, streets, bus stations, etc.) to find partners.

**Table 174: General sexual history**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had sex with a woman (vaginal or anal intercourse)	Yes		333/352 (94.6)	94.9 (92.7, 97.1)
	No		19/352 (5.4)	5.1 (2.9, 7.3)
Age at first anal sex with a man	Sample <i>M (SD)</i> = 20.6 (5.14) Mdn = 19.5 <i>N</i> = 350 <sup>1</sup> Range 10 - 54	Pop. est. <i>M (SD)</i> = 20.8 (5.39) Mdn = 20.0 - -	-	-
	< 18		100/350 (28.6)	28.5 (24.3, 32.8)

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age of partner at first anal sex with a man	Sample $M (SD) =$ 24.3 (5.69) Mdn = 23.0 $N = 351^2$ Range= 10 - 50	Pop. est. $M (SD) =$ 24.4 (5.81) Mdn = 24.0 - -	-	-
Visits outdoor sites (such as parks, streets, bus stations, etc.) to find partners	Yes No		275/352 (78.1) 77/352 (21.9)	74.8 (70.1, 79.4) 25.3 (20.6, 29.9)

<sup>1</sup> One study participant answered with zero and another one with five. Their answers were excluded from the analyses. <sup>2</sup> One study participant answered with zero. His answer was excluded from the analysis.

In the seven days before the survey, MSM in Anuradhapura on average had two sexual partners, although as many as one in five (18.1%) did not have any sexual partners in the week preceding the survey.

**Table 175: Sexual partners in the past 7 days**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of all sexual partners	Sample $M (SD) =$ 1.8 (1.16) Mdn = 2.0 $N = 352$ Range = 0 - 8	Pop. est. $M (SD) =$ 1.7 (1.13) Mdn = 2.0 - -	-	-
	0 1 2 or more		51/352 (14.5) 74/352 (21.0) 227/352 (64.5)	18.1 (13.9, 22.3) 19.7 (15.9, 23.5) 62.2 (57.1, 67.3)
Number of casual <sup>1</sup> sexual partners (among those who had at least one sexual partner)	Sample $M (SD) =$ 1.0 (0.64) Mdn = 1.0 $N = 301$ Range = 0 - 3	Pop. est. $M (SD) =$ 1.0 (0.62) Mdn = 1.0 - -		
	0 1 2 or more		49/301 (16.3) 197/301 (65.4) 55/301 (18.2)	16.0 (12.3, 19.6) 67.7 (63.2, 72.2) 16.3 (12.8, 19.9)
Number of regular <sup>2</sup> sexual partners (among those who had at least one sexual partner)	Sample $M (SD) =$ 1.1 (0.89) Mdn = 1.0	Pop. est. $M (SD) =$ 1.0 (0.81) Mdn = 1.0	-	-

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
	N = 301	-		
	Range = 0 - 6	-		
	0		59/301 (19.6)	19.0 (14.9, 23.1)
	1		193/301 (64.1)	65.6 (60.6, 70.5)
	2 or more		49/301 (16.3)	15.4 (11.8, 19.1)

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis

In the six months preceding the survey, MSM in Anuradhapura on average had four sexual partners, although close to one-third of them had five or more sexual partners (31.9%). With regard to type of relationship, on average had twice as many casual (three) than regular (two) sexual partners. Finally, at last anal sex, only two-thirds (66.0%) of MSM in Anuradhapura used a condom.

**Table 176: Sexual partners in the past 6 months**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of all sexual partners	Sample <i>M (SD)</i> 4.5 (3.05) Mdn = 3.0 N = 352 Range = 1 - 25	Pop. est. <i>M (SD)</i> 4.2 (2.70) Mdn = 3.0 - -	-	-
	1 - 2		67/352 (19.0)	23.3 (18.4, 28.0)
	3 - 4		160/352 (45.5)	44.8 (39.9, 49.8)
	5 or more		125/352 (35.5)	31.9 (27.5, 36.4)
Number of casual <sup>1</sup> sexual partners (among those who had at least	Sample <i>M (SD)</i> 1.8 (1.62) Mdn = 2.0 N = 352 Rang = 0 - 12	Pop. est. <i>M (SD)</i> 1.6 (1.51) Mdn = 1.0 - -		
	0		73/352 (20.7)	22.2 (18.4, 26.0)
	1		94/352 (26.7)	29.3 (24.7, 33.9)
	2		104/352 (29.5)	29.0 (24.6, 33.4)
	3 or more		81/352 (23.0)	19.5 (16.0, 22.9)
Number of regular <sup>2</sup> sexual partners (among those who had at least	Sample <i>M (SD)</i> 2.7 (2.41) Mdn = 2.0 N = 352 Range = 0 - 20	Pop. est. <i>M (SD)</i> 2.5 (2.07) Mdn = 2.0 - -	-	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	0	18/352 (5.1)	5.8 (3.1, 8.5)
	1	103/352 (29.3)	29.7 (25.4, 34.1)
	2	75/352 (21.3)	23.2 (19.1, 27.4)
	3 or more	156/352 (44.3)	41.2 (36.4, 46.1)
3.6 Condom use among MSM	Yes	235/351 (67.0)	66.0 (61.1, 70.9)
	No	116/351 (33.0)	34.0 (29.1, 38.9)
	Rather not say	1/352 (0.3)	-

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis

Close to half (41.1%) of MSM in Anuradhapura had ever received money, goods or services in exchange for sex. Among them, most (91.3%) have received money, goods or services in exchange for sex in the past 12 months, with their last paying partner, in most cases (97.0%), being a man. Fewer MSM in Anuradhapura have ever given money, goods or services in exchange for sex (19.3%) and among them, 81.3% had given money, goods or services in exchange for sex in the past 12 months, with their last partner, in most cases (59.8%) being a woman. Condom use at transactional sex was high; 78.9% of used a condom at last sex they were paid for, and 93.5% used a condom at last sex they paid for.

**Table 177: Transactional sex**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever received money, goods or services in exchange for sex	Yes	140/352 (39.8)	41.1 (36.3, 45.9)
	No	212/352 (60.2)	58.9 (54.1, 63.7)
Received money, goods or services in exchange for sex in the past 12 months	Yes	131/140 (93.6)	91.3 (85.9, 96.1)
	No	9/140 (6.4)	8.6 (3.9, 14.1)
Received money, goods or services in exchange for <u>anal sex with a man</u> in the past 12 months	Yes	127/131 (96.9)	97.0 (94.8, 99.3)
	No	4/131 (3.1)	2.9 (0.7, 5.2)
Sex of partner at last sex for which money was received	Woman	45/140 (32.1)	27.9 (20.5, 34.2)
	Man	95/140 (67.9)	72.1 (65.8, 79.5)
Used a condom at last sex for which money was received	Yes	114/140 (81.4)	78.9 (69.9, 87.2)
	No	26/140 (18.6)	21.0 (12.8, 30.1)
Ever given money, goods or services in exchange for sex	Yes	70/352 (19.9)	19.3 (15.6, 23.1)
	No	282/352 (80.1)	80.7 (76.9, 84.4)
Gave money, goods or services in exchange for sex with in the past 12 months	Yes	56/70 (80.0)	81.3 (72.9, 90.4)
	No	14/70 (20.0)	18.7 (9.6, 27.1)
Sex of partner at last sex for which money was given	Woman	40/70 (57.1)	59.8 (45.1, 76.0)
	Man	29/70 (41.4)	39.0 (22.9, 53.8)
	Other	1/70 (1.4)	1.2 (0.8, 1.4)
Used a condom at last sex for which money, goods or services were given	Yes	66/70 (94.3)	93.5 (86.8, 99.9)
	No	4/70 (5.7)	6.4 (0.1, 13.2)

One in four (77.8%) MSM in Anuradhapura had a casual male sexual partner in the six months before the survey. Among them, most (56.9%) have used a condom consistently in the past six months, with two in three (68.7%) having had used a condom at last anal sex with a casual partner. Those who have not used a condom at last anal sex with a casual sexual partner in most cases did so because they did not think a condom was necessary (63.3%) or because they believed condoms take away pleasure (35.6%). Finally, close to one in four (22.7%) MSM in Anuradhapura did not know or ask their last casual male sexual partner about his HIV status.

**Table 178: Casual Male Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Had a casual partner in the past 6 months <sup>1</sup>		279/352 (79.3)	77.8 (73.7, 82.0)
Frequency of condom use in the past 6 months	Every time	164/278 (59.0)	56.9 (50.5, 63.4)
	Almost every time	21/278 (7.6)	9.1 (5.0, 13.2)
	Sometimes	26/278 (9.4)	9.2 (6.2, 12.2)
	Never	67/278 (24.1)	24.8 (19.1, 30.4)
	Rather not say	1/279 (0.4)	-
Condom use at last anal sex with a casual partner	Yes	191/277 (69.0)	68.7 (63.4, 73.9)
	No	86/277 (31.0)	31.4 (26.1, 36.7)
	Don't remember	1/279 (0.4)	-
	Rather not say	1/279 (0.4)	-
Reasons for not using a condom (multiple answers)	Never heard of condoms	2/86 (2.3)	7.5 (0.0, 15.6)
	Don't know how to obtain a condom	1/86 (1.2)	1.1 (0.0, 2.5)
	I didn't think it was necessary	60/86 (69.8)	63.6 (52.6, 75.2)
	I didn't think of it	13/86 (15.1)	20.5 (10.2, 30.9)
	Not available	7/86 (8.1)	6.6 (2.4, 10.8)
	Too expensive	0/86 (0.0)	-
	Partner objected	11/86 (12.8)	13.3 (5.1, 21.6)
	Don't like them	9/86 (10.5)	11.1 (5.2, 16.9)
	Condoms take away pleasure	31/86 (36.0)	35.6 (25.1, 46.0)
HIV status of the last casual partner	HIV negative	211/279 (75.6)	77.3 (72.7, 82.0)
	HIV positive	0/279 (0.0)	-
	Did not know / ask	68/279 (24.4)	22.7 (17.9, 27.3)

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis

Almost all (94.2%) MSM in Anuradhapura had a regular male sexual partner in the six months before the survey, and most (55.9%) have met their last regular male sexual partner in a public place, such as in a street, park or in public transport. Among MSM in Anuradhapura who had a regular sexual partner in the past six months, most (56.9%) have used a condom consistently during sex, with two in three (68.4%) having had used a condom at last anal sex with a regular partner. Those who have not used a condom at last anal sex with a regular sexual partner in most cases did so because they did not think a condom was necessary (64.1%) or because they believed condoms take away pleasure (37.9%). Finally, as many as one in five (18.0%) MSM in Anuradhapura did not know or ask their last regular male sexual partner about his HIV status.

**Table 179: Regular Male Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Had a regular partner in the past 6 months <sup>1</sup>		334/352 (94.9)	94.2 (91.4, 97.1)
Frequency of condom use in the past 6 months	Every time	193/333 (58.0)	56.9 (51.6, 62.3)
	Almost every time	18/333 (5.4)	5.8 (3.2, 8.3)
	Sometimes	48/333 (14.4)	15.6 (11.6, 19.6)
	Never	74/333 (22.2)	21.7 (17.1, 26.3)
	Rather not say	1/334 (0.3)	-
Condom use at last anal sex with a regular partner	Yes	223/332 (67.2)	68.4 (63.2, 73.4)
	No	109/332 (32.8)	31.6 (26.6, 36.8)
	Don't remember	2/334 (0.6)	
Reasons for not using a condom (multiple answers)	Never heard of condoms	1/109 (0.9)	1.1 (0.0, 2.7)
	Don't know how to obtain a condom	1/109 (0.9)	1.1 (0.0, 2.7)
	I didn't think it was necessary	68/109 (62.4)	61.4 (52.0, 70.8)
	I didn't think of it	21/109 (19.3)	20.9 (12.6, 29.2)
	Not available	24/109 (22.0)	23.8 (16.2, 31.7)
	Too expensive	1/109 (0.9)	0.7 (0.0, 1.6)
	Partner objected	17/109 (15.6)	16.9 (9.7, 23.8)
	Don't like them	16/109 (14.7)	14.2 (8.5, 19.9)
	Condoms takes away pleasure	43/109 (39.4)	37.9 (29.9, 45.9)
Other (Trust my partner)	1/109 (0.9)	0.6 (0.0, 1.5)	
How last regular partner was met	Brothel	0/334 (0.0)	-
	Bar, café, disco or restaurant	4/334 (1.2)	1.5 (0.2, 2.7)
	Hotel	6/334 (1.8)	2.7 (0.2, 5.3)
	Street, park or public transport	195/334 (58.4)	55.9 (50.6, 61.1)
	Through friends	36/334 (10.8)	10.1 (7.2, 12.9)
	Internet (e.g. Facebook), chat, or	20/334 (6.0)	6.0 (3.6, 8.3)
	Motel or Guest House	16/334 (4.8)	5.5 (2.7, 8.4)
	School	1/334 (0.3)	0.3 (0.0, 0.7)
	Party	9/334 (2.7)	3.2 (1.1, 5.4)
	Intermediary	15/334 (4.5)	5.5 (3.1, 7.8)
	Service station	25/334 (7.5)	7.1 (4.8, 9.4)
	Truck stop	5/334 (1.5)	1.6 (0.4, 2.9)
	Massage Parlour / Spa	1/334 (0.3)	0.2 (0.0, 0.4)
Other (in jail)	1/334 (0.3)	0.5 (0.0, 1.5)	
HIV status of the last regular partner	HIV negative	272/334 (81.4)	82.0 (78.3, 85.8)
	HIV positive	0/334 (0.0)	-
	I did not know/ask	62/334 (18.6)	18.0 (14.2, 21.7)

<sup>1</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis

Almost all MSM in Anuradhapura had ever had sex with a woman (94.9%). Among them, most have had a female sexual partner in the year before the survey (93.4), with about half also having had a regular female sexual partner (47.8%). About two in three (63.8%) MSM in Anuradhapura have

consistently used a condom with female sexual partners in the year before the survey, with slightly more (74.7%) having had used a condom at last sex with a female sexual partner in the year preceding the survey.

**Table 180: Female Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had sex with a woman (vaginal or anal intercourse)	Yes	333/352 (94.6)	94.9 (92.7, 97.1)
	No	19/352 (5.4)	5.1 (2.9, 7.3)
Had a female sexual partner in the past 12 months	Yes	307/333 (92.2)	93.4 (91.2, 95.7)
	No	26/333 (7.8)	6.6 (4.3, 8.8)
Had vaginal sex with a female sex worker in the past 12 months*	Yes	282/307 (91.9)	90.9 (87.2, 94.5)
	No	25/307 (8.1)	9.1 (5.5, 12.8)
Had a regular female sexual partner in the past 12 months	Yes	150/307 (48.9)	47.8 (42.4, 53.1)
	No	157/307 (51.1)	52.2 (46.9, 57.6)
Frequency of condom use with female sexual partners in the past 12 months	Every time	200/307 (65.1)	63.8 (58.2, 69.2)
	Almost every time	11/307 (3.6)	4.0 (1.6, 6.4)
	Sometimes	35/307 (11.4)	12.3 (8.5, 16.3)
	Never	61/307 (19.9)	19.9 (15.9, 24.0)
Condom use at last sex with a female partner	Yes	221/331 (66.8)	66.0 (61.0, 70.9)
	No	110/331 (33.2)	34.0 (29.1, 39.1)
	Don't remember	2/333 (0.6)	-
Condom use at last sex with a female sex worker	Yes	209/276 (75.7)	74.7 (69.9, 79.6)
	No	67/276 (24.3)	25.3 (20.4, 30.1)
	Don't remember	6/282 (2.1)	-
HIV status of the last female partner	HIV-negative	273/331 (82.5)	82.8 (78.9, 86.7)
	HIV-positive	0/331 (0.0)	-
	I did not know / ask	58/331 (17.5)	17.2 (13.3, 21.1)
	Rather not say	2/333 (0.6)	-

\*Likely there was a misunderstanding regarding this question as the percentage is much higher than expected. Similar with MSM Colombo, very high.

### Use of Condoms and Lubricants

Very few (2.9%) of MSM in Anuradhapura have never heard of condoms. Among those who have, most (96.9%) also know where to obtain condoms. Specifically, MSM in Anuradhapura most often obtain condoms from private pharmacies or chemists (87.4%) or NGOs and outreach services (50.6%), government STD clinics (44.2%) and neighbourhood markets and stands (26.4%). About a quarter of MSM in Anuradhapura also obtain condoms from their sex partners (23.5%). Most MSM in Anuradhapura find condoms to be affordable (77.9%). Four in five MSM in Anuradhapura (81.0%) have ever heard of lubricants and among them, more than half use lubricants usually or always (39.6 and 27.7%, respectively). Most, however, as lubricant use saliva/water (83.4%) or baby oil (75.3%).

**Table 181: Use of condoms and lubricants**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of condoms	Yes	339/352 (96.3)	97.1 (95.9, 98.3)
	No	13/352 (3.7)	2.9 (1.7, 4.1)
Knows where to obtain condoms	Yes	330/339 (97.3)	96.9 (95.1, 98.7)
	No	9/339 (2.7)	3.1 (1.3, 5.0)
Usually obtains condoms from: (multiple response)	Government clinic - STD clinic	147/330 (44.5)	44.2 (38.9, 49.5)
	Govt. clinic - Not STD clinic	2/330 (0.6)	0.4 (0.0, 0.9)
	Private clinic	12/330 (3.6)	4.4 (1.7, 7.1)
	Private pharmacy or chemist	285/330 (86.4)	87.4 (83.9, 91.0)
	Traditional healer/herbalist	0/330 (0.0)	-
	Neighbourhood market/stand	91/330 (27.6)	26.4 (22.3, 30.4)
	Friends	37/330 (11.2)	10.1 (7.1, 13.1)
	Sex partner/s	79/330 (23.9)	23.5 (19.5, 27.5)
	Bar / Nightclub	3/330 (0.9)	1.0 (0.2, 1.7)
	NGOs/ outreach service	172/330 (52.1)	50.6 (45.7, 55.6)
	Service station(s)	0/330 (0.0)	-
	I do not use condoms	1/330 (0.3)	0.2 (0.0, 0.5)
Other	2/330 (0.6)	0.6 (0.0, 1.2)	
Affordability of male condoms	Affordable	262/339 (77.3)	77.9 (73.6, 82.0)
	Somewhat affordable	19/339 (5.6)	5.3 (2.8, 7.8)
	Not affordable	57/339 (16.8)	16.6 (12.7, 20.6)
	Don't know	1/339 (0.3)	0.3 (0.0, 0.7)
Ever heard of lubricants	Yes	283/352 (80.4)	81.0 (77.2, 84.8)
	No	69/352 (19.6)	19.0 (15.2, 22.8)
Frequency of lubricant use during vaginal or anal sex	Always	80/283 (28.3)	27.7 (22.4, 33.0)
	Usually	112/283 (39.6)	39.6 (34.0, 45.1)
	Sometimes	35/283 (12.4)	10.6 (7.6, 13.5)
	Rarely	21/283 (7.4)	7.6 (4.9, 10.3)
	Never	35/283 (12.4)	14.4 (10.5, 18.7)
Type of lubricant used (multiple response)	Glycerine	44/248 (17.7)	21.5 (15.5, 27.6)
	Saliva or water	210/248 (84.7)	83.4 (78.9, 87.8)
	Vaseline	53/248 (21.4)	23.3 (17.8, 28.7)
	Baby oil	194/248 (78.2)	75.3 (69.8, 80.9)
	Lotion	14/248 (5.6)	5.2 (2.9, 7.5)
	Other oil	22/248 (8.9)	8.6 (5.1, 12.1)
	Water-based	8/248 (3.2)	3.4 (1.4, 5.5)
	Silicone-based	3/248 (1.2)	0.9 (0.0, 1.7)
	Soap	11/248 (4.4)	4.2 (2.0, 6.3)

### Sexually Transmitted Infections

About four in five (82.9%) MSM in Anuradhapura have ever heard of diseases that can be transmitted sexually. With regard to recognizing and describing symptoms of an STI, most of them know that genital discharge and itching in women (51.8 and 48.8%%, respectively) and genital ulcers or sores and itching in men (56.3 and 55.3%, respectively) indicates a possible sexually transmitted infection.

Very few had a symptom of a sexually transmitted infection (i.e., a discharge or genital ulcer (sore)) or received an STI diagnosis in the year preceding the survey (2.0 and 2.2%, respectively).

**Table 182: Sexually transmitted infections**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of diseases that can be transmitted sexually	Yes	294/352 (83.5)	82.9 (78.9, 86.8)
	No	58/352 (16.5)	17.1 (13.2, 21.1)
Can describe symptoms of sexually transmitted infections in women (multiple response)	1. Abdominal pain	47/293 (16.0)	17.2 (12.5, 22.0)
	2. Abnormal genital discharge	155/293 (52.9)	51.8 (46.6, 57.0)
	3. Burning pain on urination	74/293 (25.3)	26.7 (21.7, 31.8)
	4. Genital ulcers or sores	101/293 (34.5)	32.2 (26.9, 37.3)
	5. Swelling in groin area	18/293 (6.1)	7.0 (4.0, 10.0)
	6. Itching	138/293 (47.1)	48.8 (43.4, 54.3)
	Don't know any Rather not say	1/293 (0.3) 1/294 (0.3)	-
Symptoms mentioned (0-6)	0	1/293 (0.3)	0.3 (0.0, 0.7)
	1	118/293 (40.3)	39.3 (34.2, 44.4)
	2	119/293 (40.6)	41.3 (36.2, 46.4)
	3	45/293 (15.4)	15.9 (11.8, 20.1)
	4	9/293 (3.1)	2.6 (1.0, 4.2)
	5	0/293 (0.0)	-
	6	1/352 (0.3)	0.6 (0.0, 1.5)
Can describe symptoms of sexually transmitted infections in men (multiple response)	1. Genital discharge	110/294 (37.4)	36.9 (31.3, 42.5)
	2. Burning pain on urination	66/294 (22.4)	24.3 (19.7, 28.9)
	3. Genital ulcers or sores	166/294 (56.5)	56.3 (50.9, 61.7)
	4. Swelling in groin area	26/294 (8.8)	10.0 (6.7, 13.3)
	5. Itching	163/294 (55.4)	55.3 (50.3, 60.2)
Symptoms mentioned (0-5)	0	0/294 (0.0)	-
	1	125/294 (42.5)	41.7 (36.4, 46.9)
	2	111/294 (37.8)	37.5 (32.5, 42.5)
	3	49/294 (16.7)	17.6 (12.8, 22.5)
	4	8/294 (2.7)	2.6 (1.0, 4.2)
	5	1/294 (0.3)	0.6 (0.0, 1.5)
Tested for sexually transmitted diseases in the past 3 months	Yes	39/352 (11.1)	10.6 (7.6, 13.6)
	No	313/352 (88.9)	89.4 (86.4, 92.4)
Received an STI diagnosis in the past 12 months	Yes	7/294 (2.4)	2.2 (0.7, 3.6)
	No	287/294 (97.6)	97.8 (96.4, 99.2)
Had a discharge or genital ulcer (sore) in the last 12 months	Yes	6/350 (1.7)	2.0 (0.6, 3.4)
	No	344/350 (98.3)	98.0 (96.6, 99.4)
	Don't know	2/352 (0.6)	-
Sought treatment <sup>1</sup>	Yes	4/5 (80.0)	-
	No	1/5 (20.0)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Don't know	1/6 (16.7)	-
Places where treatment was sought (multiple response) <sup>1</sup>	Government clinic - STD clinic	1/4 (25.0)	-
	Government clinic - Not STD clinic	0/4 (0.0)	-
	Private clinic	2/4 (50.0)	-
	Private pharmacy or chemist	0/4 (0.0)	-
	Traditional healer/herbalist	0/4 (0.0)	-
	I used medicine or herbs from home	0/4 (0.0)	-
	Other (in jail)	1/4 (25.0)	-
Reasons for seeking treatment from that source (multiple response) <sup>1</sup>	Confidentiality	3/4 (75.0)	-
	Affordability	0/4 (0.0)	-
	Recommended by friend or acquaintance	1/4 (25.0)	-
	Quality and/or specialized care given at this place	0/4 (0.0)	-
	Knows the caregivers	0/4 (0.0)	-
	Known friendliness of the caregivers	0/4 (0.0)	-
	Proximity/location	1/4 (25.0)	-
Reasons for not seeking treatment (multiple response) <sup>1</sup>	Didn't know where to go for treatment	0/1 (0.0)	-
	Embarrassed or afraid to seek treatment	0/1 (0.0)	-
	Could not afford treatment	0/1 (0.0)	-
	Unable to get transportation	0/1 (0.0)	-
	Didn't think I needed it	1/1 (100)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Prevention Programs

Among MSM in Anuradhapura who had ever tested for HIV, a majority (81.2%) have told their counsellor/health care provider that they have sex with men at their last HIV testing. In addition, almost all (98.6%) of them were satisfied or very satisfied with the quality of services provided at the place where they received their last HIV test.

**Table 183: Contact with healthcare provider**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
<b>STI treatment</b>			
Told the healthcare provider that they have sex with men when the last treatment for any symptom of an STI or a diagnosis for an STI was received <sup>1</sup>	Yes	3/4 (75.0)	-
	No	1/4 (25.0)	-
Satisfaction with how the healthcare provider treated them during this last visit <sup>1</sup>	Very satisfied	4/4 (100)	-
	Somewhat satisfied	0/4 (0.0)	-
	Not satisfied	0/4 (0.0)	-
<b>HIV testing</b>			
Told the counsellor/health care provider that they have sex with men when last HIV test was received	Yes	54/62 (87.1)	81.2 (75.7, 83.3)
	No	8/62 (12.9)	18.8 (16.7, 24.3)
Satisfaction with the quality of services provided at the place where the last HIV test was received	Very satisfied	58/62 (93.5)	92.6 (85.8, 98.9)
	Satisfied	3/62 (4.8)	6.0 (0.4, 12.3)
	A little satisfied	1/62 (1.6)	1.4 (0.0, 3.1)
	Not satisfied	0/62 (0.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

In the year preceding the survey, one in four (27.4%) MSM in Anuradhapura had sought medical care, with very few (1.2%) of them experiencing any difficulty getting medical care when they sought it.

**Table 184: Use of healthcare services in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sought medical care for any reason	Yes	110/351 (31.3)	27.4 (23.1, 31.6)
	No	241/351 (68.7)	72.6 (68.4, 76.9)
	Don't Know	1/352 (0.3)	-
Had difficulty getting medical care when they sought it	Yes	1/110 (0.9)	1.2 (0.0, 3.2)
	No	109/110 (99.1)	98.8 (96.8, 100.0)
Type of difficulty (multiple response) <sup>1</sup>	Too expensive	0/1 (0.0)	-
	Too far away	0/1 (0.0)	-
	Could not take time from work	0/1 (0.0)	-
	Long waiting times	1/1 (100)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

Slightly less than half (40.2%) of MSM in Anuradhapura have been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the three months preceding the survey. Among

those who have, most have received general HIV/STI prevention/transmission information (90.0%), condoms and lubricants (79.9%), or counselling on condom use and safe sex (70.2%). In addition, one in ten (10.6%) of MSM in Anuradhapura has tested for an STI in the three months preceding the survey. Coverage by HIV prevention programs, defined as receipt of at least two interventions (i.e., Given condoms and lubricant; Counselling on condom use and safe sex; Received an STI test) in the past three months, is somewhat low, at 27.5%.

**Table 185: Coverage of HIV prevention programs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the past 3 months	Yes	140/352 (39.8)	40.2 (35.5, 44.8)
	No	212/352 (60.2)	59.9 (55.2, 64.5)
Services received	General HIV/STI prevention/transmission information	126/140 (90.0)	90.0 (85.3, 94.9)
	Condoms and lubricants	116/140 (82.9)	79.9 (72.5, 87.5)
	Referral for STI treatment	3/140 (2.1)	2.1 (0.0, 4.3)
	Referral for VCT	2/140 (1.4)	1.2 (0.0, 2.4)
	Counselling on condom use and safe sex	105/140 (75.0)	70.2 (62.6, 77.9)
Tested for sexually transmitted diseases in the past 3 months	Yes	39/352 (11.1)	10.6 (7.8, 13.5)
	No	313/352 (88.9)	89.4 (86.5, 92.3)
Coverage of HIV prevention programs <sup>1</sup>		100/352 (28.4)	27.5 (23.5, 31.5)

<sup>1</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Tested for sexually transmitted diseases)

### Experiences of Discrimination and Violence on the basis of being an MSM

Very few MSM in Anuradhapura have been refused health care (0.9%) or police assistance (0.4%) on the basis of being an MSM. Prevalence of verbal, physical, and sexual violence against them is also low, with 0.7% having experienced verbal insults, 1.9% having experienced physical violence and 0.5% having been sexually assaulted or raped.

**Table 186: Experiences of Discrimination and Violence on the basis of being an MSM**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Refused health care	Yes	4/351 (1.1)	0.9 (0.3, 1.7)
	No	347/351 (98.9)	99.0 (98.3, 99.8)
	Don't Know	1/352 (0.3)	-
Refused police assistance	Yes	2/351 (0.6)	0.4 (0.0, 0.8)
	No	349/351 (99.4)	99.6 (99.2, 99.9)
	Don't Know	1/352 (0.3)	-
Verbally insulted	Yes	3/350 (0.9)	0.7 (0.0, 1.4)
	No	347/350 (99.1)	99.3 (98.6, 99.9)
	Don't Know	2/352 (0.6)	-
Hit, kicked, or beaten	Yes	5/352 (1.4)	1.9 (0.2, 3.6)
	No	347/352 (98.6)	98.1 (96.4, 99.8)
Sexually assaulted or raped	Yes	2/352 (0.6)	0.5 (0.0, 1.1)
	No	350/352 (99.4)	99.5 (98.9, 99.9)
Sexual assailant/rapist <sup>1</sup>	Stranger	1/2 (50.0)	-
	Social acquaintance	1/2 (50.0)	-
	Family/relative	0/2 (0.0)	-
	Police	0/2 (0.0)	-
	Paying sexual partner (Client)	0/2 (0.0)	-
	Non-paying partner or boyfriend/girlfriend	0/2 (0.0)	-
Sought medical treatment for sexual assault/rape <sup>1</sup>	Yes	0/2 (0.0)	-
	No	2/2 (100)	-
Reported sexual assault/rape to the police <sup>1</sup>	Yes	0/2 (0.0)	-
	No	2/2 (100)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Alcohol and Drugs

Most MSM in Anuradhapura (83.5%) have ever had a drink containing alcohol, and among those who have, a majority have a drink containing alcohol at least once a week (74.4%), making alcohol consumption among MSM in Anuradhapura somewhat high.

**Table 187: Alcohol consumption**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had a drink containing alcohol	Yes	295/351 (84.0)	83.5 (80.0, 87.1)
	No	56/351 (15.9)	16.6 (12.9, 20.1)
	Don't Know	1/352 (0.3)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Alcohol consumption in the past month	I never drink alcohol	12/295 (4.1)	4.0 (2.0, 6.0)
	Never in the past month	11/295 (3.7)	3.9 (1.5, 6.3)
	Less than once a week	51/295 (17.3)	17.7 (13.6, 21.9)
	At least once a week	157/295 (53.2)	55.3 (49.3, 61.5)
	Every day	64/295 (21.7)	19.1 (14.4, 23.5)

As many as 18% of MSM in Anuradhapura had ever used heroin, although only 4.9% had ever injected drugs for non-medical purposes.

**Table 188: Use of non-prescribed/illicit drugs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of drug used			
Heroin	<i>Frequency of consumption</i>		
	Have never used	284/352 (80.7)	82.0 (78.5, 85.4)
	Never in the past 12 months	1/352 (0.3)	0.3 (0.0, 0.9)
	Monthly or less	14/352 (4.0)	4.2 (2.4, 6.1)
	Several times a month	10/352 (2.8)	2.6 (1.2, 4.1)
	Two to four times a month	6/352 (1.7)	1.6 (0.0, 3.2)
	Two to three times a week	18/352 (5.1)	4.4 (2.8, 6.0)
Cannabis	<i>Frequency of consumption</i>		
	Have never used	342/347 (98.6)	98.5 (97.4, 99.6)
	Never in the past 12 months	0/347 (0.0)	-
	Monthly or less	2/347 (0.6)	0.6 (0.0, 1.1)
	Several times a month	1/347 (0.3)	0.2 (0.0, 0.5)
	Two to four times a month	1/347 (0.3)	0.5 (0.0, 1.3)
	Two to three times a week	0/347 (0.0)	-
Cocaine	<i>Frequency of consumption</i>		
	Have never used	325/350 (92.9)	93.9 (92.4, 95.6)
	Never in the past 12 months	0/350 (0.0)	-
	Monthly or less	6/350 (1.7)	1.5 (0.7, 2.3)
	Several times a month	3/350 (0.9)	0.6 (0.2, 1.1)
	Two to four times a month	1/350 (0.3)	0.2 (0.0, 0.4)
	Two to three times a week	4/350 (1.1)	1.2 (0.4, 2.0)
Ecstasy	<i>Frequency of consumption</i>		
	Have never used	351/352 (99.7)	99.8 (99.5, 100.0)
	Never in the past 12 months	0/352 (0.0)	-
	Monthly or less	1/352 (0.3)	0.2 (0.0, 0.5)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Several times a month	0/352 (0.0)	-
	Two to four times a month	0/352 (0.0)	-
	Two to three times a week	0/352 (0.0)	-
	Four or more times a week	0/352 (0.0)	-
Amphetamines	<i>Frequency of consumption</i>		
	Have never used	350/352 (99.4)	99.4 (98.9, 99.9)
	Never in the past 12 months	0/352 (0.0)	-
	Monthly or less	1/352 (0.3)	0.2 (0.0, 0.5)
	Several times a month	0/352 (0.0)	-
	Two to four times a month	0/352 (0.0)	-
	Two to three times a week	0/352 (0.0)	-
	Four or more times a week	0/352 (0.0)	-
Don't Know	1/352 (0.3)	0.3 (0.0, 0.8)	
Opium	<i>Frequency of consumption</i>		
	Have never used	351/352 (99.7)	99.8 (99.5, 100.0)
	Never in the past 12 months	0/352 (0.0)	-
	Monthly or less	1/352 (0.3)	0.2 (0.0, 0.5)
	Several times a month	0/352 (0.0)	-
	Two to four times a month	0/352 (0.0)	-
	Two to three times a week	0/352 (0.0)	-
	Four or more times a week	0/352 (0.0)	-
Hashish	<i>Frequency of consumption</i>		
	Have never used	348/350 (99.4)	99.2 (98.2, 100.0)
	Never in the past 12 months	0/350 (0.0)	-
	Monthly or less	0/350 (0.0)	-
	Several times a month	2/350 (0.6)	0.8 (0.0, 1.8)
	Two to four times a month	0/350 (0.0)	-
	Two to three times a week	0/350 (0.0)	-
	Four or more times a week	0/350 (0.0)	-
Rather not say	2/352 (0.6)	-	
Other drugs	<i>Frequency of consumption</i>		
	Have never used	269/351 (76.6)	76.2 (71.7, 80.6)
	Never in the past 12 months	1/351 (0.3)	0.9 (0.0, 2.5)
	Monthly or less	8/351 (2.3)	2.6 (0.7, 4.6)
	Several times a month	3/351 (0.9)	0.9 (0.0, 1.8)
	Two to four times a month	5/351 (1.4)	2.5 (0.2, 4.8)
	Two to three times a week	17/351 (4.8)	4.2 (2.6, 5.8)
	Four or more times a week	47/351 (13.4)	12.3 (9.1, 15.5)
	Don't Know	1/351 (0.3)	0.5 (0.0, 1.2)
Rather not say	1/352 (0.3)	-	

**Table 189: Use of non-prescribed/illicit drugs by injection**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever injected drugs for non-medical purposes	Yes	19/352 (5.4)	4.9 (3.1, 6.9)
	No	333/352 (94.6)	95.0 (93.1, 96.9)
Ever used non-sterile injecting equipment when injecting drugs <sup>1</sup>	Yes	16/18 (88.9)	-
	No	2/18 (11.1)	-
	Don't Know	1/19 (5.3)	-
Safe injecting practice <sup>1</sup>	Yes	2/18 (11.1)	-
	No	16/18 (88.9)	-
	Don't know	1/19 (5.3)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses. <sup>2</sup> % Used a sterile needle and syringe at last injection

**Table 190: Use of non-prescribed/illicit drugs by injection in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Injected drugs for non-medical purposes in the past 12 months <sup>1</sup>	Yes	17/19 (89.5)	-
	No	2/19 (10.5)	-
Frequency of injecting drugs <sup>1</sup>	Monthly or less	2/17 (11.8)	-
	Two to four times a month	2/17 (11.8)	-
	Two to three times a week	6/17 (35.3)	-
	Four or more times a week	7/17 (41.2)	-
Type of drug that was injected (multiple response) <sup>1</sup>	1. Heroin	17/17 (100)	-
	2. Cocaine	2/17 (11.8)	-
	3. Crack cocaine	0/17 (0.0)	-
	4. Churus/Ash	0/17 (0.0)	-
	5. Meth/amphetamine	0/17 (0.0)	-
	6. Ganja Mal	0/17 (0.0)	-
	7. Methadone	0/17 (0.0)	-
	8. Kerala Ganja	0/17 (0.0)	-
	9. Ganja	10/17 (58.8)	-
	10. Sudol (tablet)	9/17 (52.9)	-
	11. Rifernol (tablet)	0/17 (0.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Media

Regarding media use, MSM in Anuradhapura most frequently watch TV (most days or every day: 93.0%) or listen to the radio (most days or every day: 82.5%). Many also read the newspaper (most days or every day: 76.9%). Somewhat fewer MSM in Anuradhapura regularly use the watch (most

days or every day: 58.7%) and about half at least sometimes use the Internet to find sexual partners (56.3%). Finally, almost all (93.9%) MSM in Anuradhapura have a mobile phone.

**Table 191: Use of media in the past 30 days**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Radio	Never	27/352 (7.7)	7.8 (5.4, 10.1)
	Once a month	10/352 (2.8)	2.9 (1.0, 4.7)
	Once a week	21/352 (6.0)	5.6 (3.6, 7.6)
	Most days	156/352 (44.3)	43.6 (38.8, 48.3)
	Every day	134/352 (38.1)	38.9 (34.2, 43.6)
	Don't Know	4/352 (1.1)	1.3 (0.2, 2.4)
TV	Never	7/352 (2.0)	2.0 (0.8, 3.3)
	Once a month	2/352 (0.6)	0.4 (0.0, 0.7)
	Once a week	16/352 (4.5)	4.6 (2.8, 6.5)
	Most days	194/352 (55.1)	54.5 (49.5, 59.5)
	Every day	133/352 (37.8)	38.5 (33.5, 43.4)
Newspaper	Never	60/352 (17.0)	17.5 (13.7, 21.3)
	Once a month	7/352 (2.0)	1.9 (0.7, 3.3)
	Once a week	13/352 (3.7)	3.5 (1.9, 5.1)
	Most days	155/352 (44.0)	42.2 (37.6, 46.9)
	Every day	117/352 (33.2)	34.7 (30.1, 39.4)
Internet	Never	131/352 (37.2)	36.4 (31.4, 41.5)
	Once a month	11/352 (3.1)	3.6 (1.6, 5.6)
	Once a week	5/352 (1.4)	1.3 (0.4, 2.2)
	Most days	96/352 (27.3)	26.1 (21.6, 30.4)
	Every day	109/352 (31.0)	32.6 (28.0, 37.3)
Uses Internet to find sexual partners	Never	156/352 (44.3)	43.7 (39.0, 48.4)
	Once a month	10/352 (2.8)	4.0 (1.4, 6.5)
	Once a week	8/352 (2.3)	2.1 (0.9, 3.3)
	Most days	99/352 (28.1)	26.8 (22.3, 31.2)
	Every day	79/352 (22.4)	23.5 (19.3, 27.6)
Has a mobile phone	Yes	331/352 (94.0)	93.9 (91.8, 96.0)
	No	21/352 (6.0)	6.1 (4.0, 8.2)

### Multiplier questions

In May, June or July of 2017, 53.6% of MSM in Anuradhapura have received any services (educational leaflets, condoms, HIV counselling) from the NGO Rajarata Gemi Pahana. Somewhat fewer (44.9%) have received condoms from the same NGO and 9.3% were escorted by NGO Rajarata Gemi Pahana's staff to an STI clinic. About one in four MSM in Anuradhapura (24.1%) received a purse by peer educators during their outreach work in October/November 2017. Finally, a quarter of MSM in Anuradhapura participated in the first IBBS in Sri Lanka, implemented in 2014.

**Table 192: Multiplier questions**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Received any services (educational leaflets, condoms, HIV counselling) from the NGO Rajarata Gemi Pahana in Anuradhapura in May, June or July 2017	Yes	184/352 (52.3)	53.6 (48.6, 58.5)
	No	168/352 (47.7)	46.4 (41.5, 51.4)
Received condoms from the NGO Rajarata Gemi Pahana in Anuradhapura in May, June or July 2017	Yes	161/351 (45.9)	44.9 (40.0, 49.9)
	No	190/351 (54.1)	55.1 (50.2, 60.0)
	Don't Know	1/352 (0.3)	-
Escorted to an STI clinic by the staff of the NGO Rajarata Gemi Pahana in Anuradhapura in May, June or July 2017	Yes	34/352 (9.7)	9.3 (6.7, 11.9)
	No	318/352 (90.3)	90.7 (88.1, 93.3)
Received a purse by peer educators (staff of the NGO Rajarata Gemi Pahana in Anuradhapura) in the week of 30 October - 2 November 2017 during their outreach work	Yes	72/352 (20.5)	19.9 (16.1, 23.8)
	No	280/352 (79.5)	80.1 (76.2, 83.9)
Participated in the first IBBS in Sri Lanka in 2014	Yes	88/352 (25.0)	24.1 (20.2, 28.1)
	In Colombo	0/87 (0.0)	-
	In Galle	0/87 (0.0)	-
	In Anuradhapura	87/87 (100)	-
	Don't Know	1/88 (1.1)	-

## 3. Summary results

### 3.3 People Who Inject Drugs

#### 3.3.1. Colombo

A total of 305 PWID respondents were recruited in Colombo, including 83 seeds. For estimates, Gile's SS with population size estimate of 2,000 was used along with 0.95 confidence intervals, and 5,000 bootstraps. Across the tables presented below, because estimates based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

#### Homophily and Convergence

As previously mentioned, a homophily value of one means no homophily, while values above one show the presence of positive homophily (e.g. people are recruiting similar to themselves), and values below 1 mean negative homophily (e.g. people are recruiting different from themselves). In the PWID Colombo sample, the homophily ranged from 0.92 to 1.71. The only indicator with a somewhat higher homophily is GAM indicator #3.4 for knowledge of HIV amongst PWID, otherwise the homophily is generally weak. By the 200<sup>th</sup> participant, population estimates became stable for six out of seven key indicators. For the final key indicator, avoidance of HIV services, populations estimate is showing a tendency to become stable around the 250<sup>th</sup> participant. Given that the sample size has been reached and the indicators is measured only among participants who have not received an HIV test, this does not have an impact on the results interpretation.

**Table 193: Homophily analysis**

	<i>Target indicator</i>	<i>Recruitment homophily</i>	<i>Estimated population homophily</i>
1	HIV prevalence among PWID <sup>1</sup> (% HIV positive)	-	-
2	Viral hepatitis among PWID (HBV or HCV)	1.00	1.14
3	HIV and hepatitis (HBV or HCV) co-infection among PWID <sup>1</sup>	-	-
4	Knowledge of HIV status among PWID <sup>2</sup> (% Know HIV status from an HIV test)	1.03*	1.38
5	Coverage of HIV prevention programs among PWID <sup>3</sup> (% Reached with HIV/AIDS prevention programs)	(1.01*)	-
6	Condom use among PWID <sup>4</sup> (% Used a condom the last time they had sex)	0.97	1.03
7	Safe injecting practices among PWID (% Used a sterile needle and syringe at last injection in the past one month)	0.95	1.00
8	Discriminatory attitudes towards PLHIV <sup>5</sup> (%who answer 'No' to at least one of the two questions)	1.00	1.02
9	Avoidance of HIV services because of stigma and discrimination <sup>6</sup> among PWID (%who answer 'Yes' to at least one of the reasons)	0.99	0.92
10	Age (% Mdn+)	1.01	0.99
11	Income (% 20,000 Rs.+)	1.03	1.17

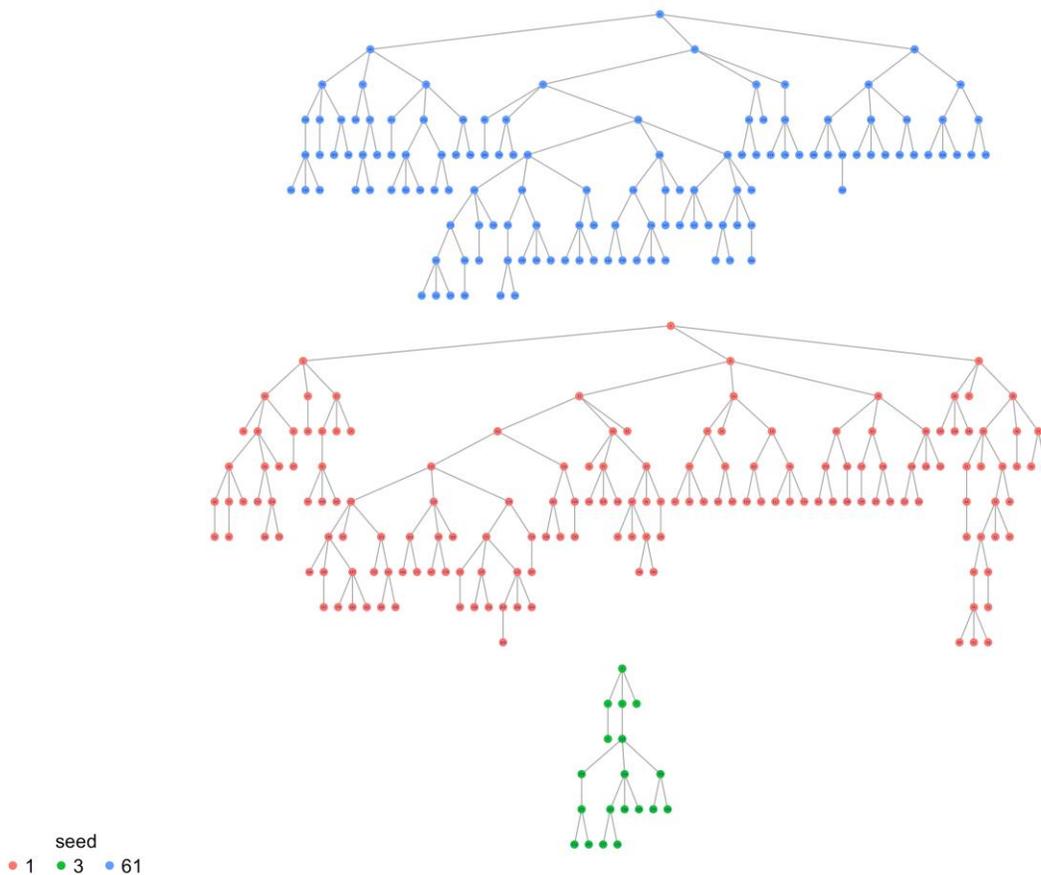
<sup>1</sup> Not calculated because there were not any HIV-positive cases. <sup>2</sup> Tested and positive or tested in the past 12 months and negative. <sup>3</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Received new, clean needles or syringes). <sup>4</sup> Among those who injected drugs and had sexual intercourse in the past one month. <sup>5</sup> Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?; Do you think that children living with HIV should be able to attend school with children who are HIV negative? <sup>6</sup> Did not seek HIV testing/prevention/treatment services because of: Fear of or concern about stigma by staff or neighbours; Fear of or concern about or experienced violence; Fear of or concern about or experienced police harassment or arrest. This Global AIDS Monitoring indicator has changed. Please see Global AIDS Monitoring 2018, pg. 96.

\*  $p < 0.05$

### Recruitment

Recruitment started with three initial respondents (seeds). Among them, two were almost equally productive, accounting for 52.5% and 41.3% of the total sample. Through the third seed only 6.2% of the total sample was recruited.

Figure 16. Recruitment tree – PWID



**Table 194: Recruitment information**

Characteristic	Response	Sample proportion n/N (%)
Main reason for participation	Interest in HIV and sexual health	27/305 (8.9)
	HIV test	236/305 (77.4)
	Interest in issues related to PWID	40/305 (13.1)
	Helping the community	1/305 (0.3)
	Friend wanted me to participate	1/305 (0.3)
	Someone forced me	0/305 (0.0)
	Incentive/Gift	0/305 (0.0)
Mode of receiving the coupon	Received the coupon from a friend/ acquaintance	301/305 (98.7)
	Found the coupon laying around somewhere	1/305 (0.3)
	Bought or exchanged it for something	0/305 (0.0)
	Seed (from the IBBS office)	3/305 (1.0)
Acquaintances for	< 6 months	36/301 (12.0)
	6 months – 1 year	55/301 (18.3)
	> 1 year	210/301 (69.8)
Screener’s confidence that participant is PWID	Confident	305/305 (100)
	Somewhat confident	0/305 (0.0)

On average, study participants knew about ten other PWID. When asked how many of the PWID they knew who were at least 18 years of age, who lived in Colombo, and who they have seen in the past one month, on average, study participants knew seven other PWID.

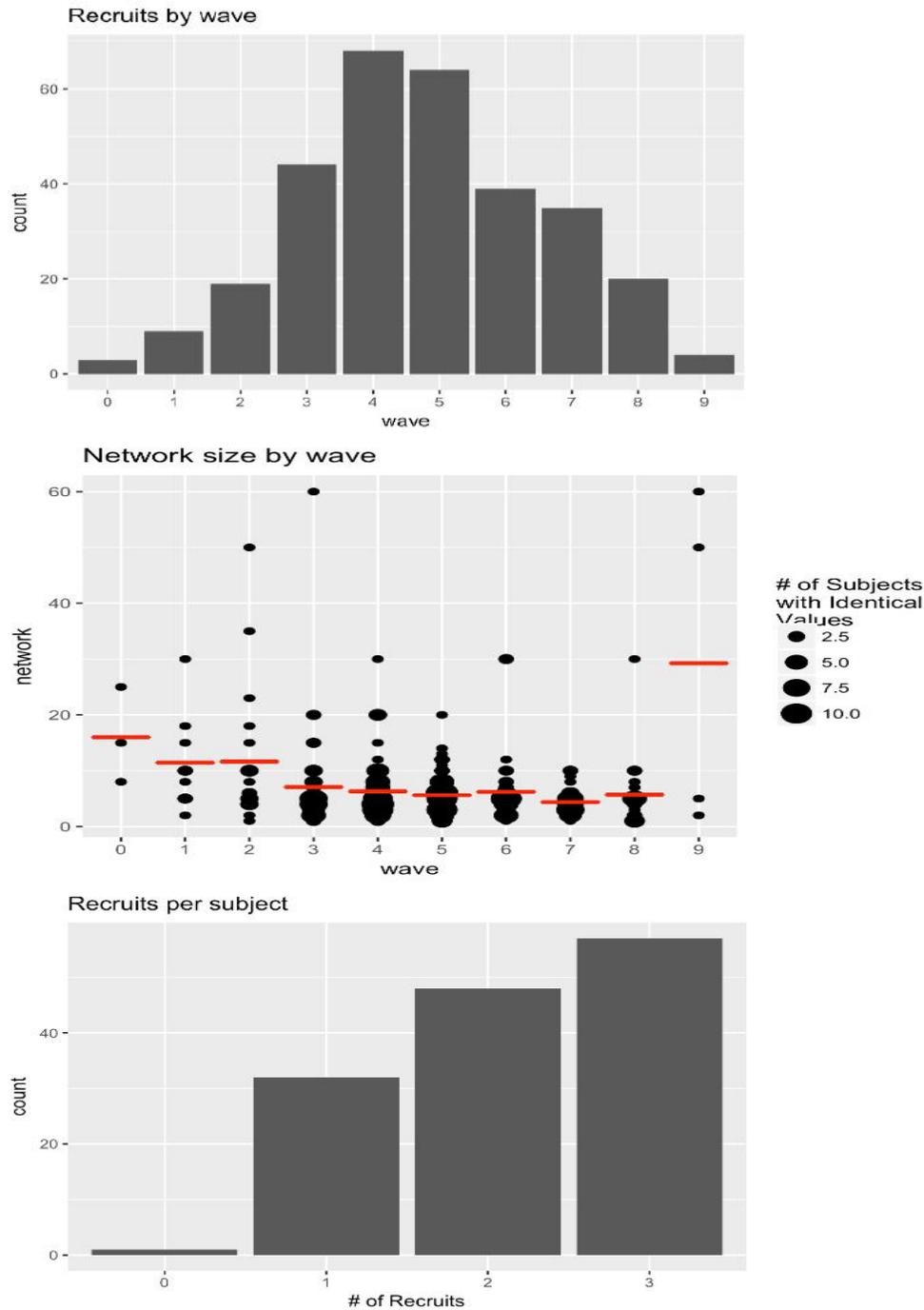
**Table 195: Network size questions**

Characteristic	Sample statistics
How many people do you know (they know your name and you know theirs), who have injected drugs for non-medical purposes in the past 12 months?	<i>N</i> = 305 <i>M</i> ( <i>SD</i> ) = 10.5 (9.63) Mdn = 8.0 Range = 1 – 60
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many are above the age of 18? <sup>1</sup>	<i>N</i> = 305 <i>M</i> ( <i>SD</i> ) = 9.8 (9.24) Mdn = 8.0 Range = 1 – 60
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many live, work or study in _____ [city of survey]? <sup>2</sup>	<i>N</i> = 305 <i>M</i> ( <i>SD</i> ) = 8.8 (8.61) Mdn = 6.0 Range = 1 – 60
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many have you seen in the past 1 month? <sup>3,4</sup>	<i>N</i> = 305 <i>M</i> ( <i>SD</i> ) = 6.9 (7.70) Mdn = 5.0 Range = 1 – 60

<sup>1</sup> Three respondents answered zero. Their answers were changed to one. <sup>2</sup> Three respondents answered zero. Their answers were changed to one. <sup>3</sup> Four respondents answered zero. Their answers were changed to one. <sup>4</sup> In the estimation of population frequencies and statistics, this question was used as the network size question.

A total of nine waves was reached among PWID in Colombo, with the majority of respondents recruited in waves four and five. With the exception of the ninth wave, due to a low number of respondents ( $n = 4$ ) and two outliers, as is expected, the average network size is lower in subsequent waves, ranging from 16 in wave zero to 4 and 6 in waves seven and eight, respectively. Overall, recruitment in Colombo went well, with a majority of study participants recruiting to the study two or three other PWID.

**Figure 17. Recruitment diagnostics - PWID**



## Biological Indicators

Overall, no HIV prevalence was found, and there were only 2 cases who tested positive for syphilis by VDRL (0.3%). Also, while 17 cases and 1 cases were positive for Hepatitis C and B (6.2% and 0.1%, respectively), no cases were comorbid with IV and any Hepatitis.

**Table 196: Biological test results**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Positive for HIV		0/305 (0.0)	-
Positive for syphilis (VDRL)	Weakly reactive	2/305 (0.7)	0.3 (0.0, 0.6)
Positive for syphilis (TPPA)		6/305 (2.0)	2.4 (0.0, 5.1)
Positive for syphilis (onsite testing)		5/305 (1.6)	2.2 (0.0, 4.8)
Positive for antibody to hepatitis C virus		17/305 (5.6)	6.2 (2.8, 9.5)
Positive for hepatitis B surface antigen		1/305 (0.3)	0.1 (0.0, 0.3)
Viral hepatitis among PWID (HBV or HCV)		18/305 (5.9)	6.3 (3.0, 9.6)
HIV and hepatitis (HBV or HCV) co-infection		0/305 (0.0)	-

## Socio-Demographic Characteristics

All PWID in Colombo were born in Sri Lanka, have Sri Lankan citizenship and live in Colombo.

**Table 197: Citizenship and Residence**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Citizenship	Sri Lankan	305/305 (100)	-
Country of birth	Sri Lanka	305/305 (100)	-
District of residence in the past year	Colombo	305/305 (100)	-
Primary residence is Colombo	Yes	305/305 (100)	-

The mean age of PWID in Colombo is 42.3 years, with only a quarter (28.1%) being younger than 35 years of age. With regard to ethnicity and language spoken at home, a majority (84.3 and 90.6%, respectively) of PWID in Colombo are Sinhalese. About one in five (19.7%) PWID in Colombo cannot read and write, although almost all PWID in Colombo have attended at least some formal education (92.8%). A majority of PWID in Colombo work at least occasionally (80.3%) and earn more than 20,000 Sri Lankan Rupees (127 USD) per month (86.7%).

**Table 198: Socio-demographic indicators**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age	Sample M (SD) = 42.4 (11.76) Mdn = 42.0	Pop. est. M (SD) = 42.3 (11.78) Mdn = 41.0	-	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	N = 305 Range = 20 - 76	- -	
Age groups	18 - 24 25 - 34 35 - 44 ≥ 45	18/305 (5.9) 68/305 (22.3) 93/305 (30.5) 126/305 (41.3)	6.2 (2.0, 10.4) 21.9 (16.6, 27.2) 32.5 (26.2, 38.8) 39.5 (32.6, 46.3)
Sex	Woman Man	14/305 (4.6) 291/305 (95.4)	4.3 (1.9, 6.6) 95.7 (93.4, 98.1)
Sex same as at birth	Yes	303/305 (99.3)	99.4 (98.1, 100)
Ethnicity	Sinhalese Sri Lankan Tamil Indian Tamil Moor/Muslim Burgher Malay	261/305 (85.6) 27/305 (8.9) 2/305 (0.7) 15/305 (4.9) 0/305 (0.0) 0/305 (0.0)	84.3 (78.7, 90.0) 9.5 (5.3, 13.8) 0.3 (0.0, 0.6) 5.8 (1.8, 9.8) - -
Languages spoken at home (multiple response)	Sinhalese Tamil English Other	276/305 (90.5) 39/305 (12.8) 0/305 (0.0) 0/305 (0.0)	90.6 (86.5, 94.7) 13.7 (8.7, 18.7) - -
Can read and write	Yes	254/305 (83.3)	80.3 (74.1, 86.6)
Completed level of education	Never attended school Grade 1-5 Grade 6-10 Passed O/L Passed A/L Completed Diploma Completed Degree	20/305 (6.6) 57/305 (18.7) 135/305 (44.3) 80/305 (26.2) 13/305 (4.3) 0/305 (0.0) 0/305 (0.0)	7.2 (3.0, 11.3) 20.9 (15.2, 26.4) 45.5 (39.0, 52.0) 22.4 (17.3, 27.5) 4.0 (1.4, 6.7) - -
Main activity	In paid work (including parental or other leave) Occasional work In unpaid or voluntary work Unemployed Student Retired Other	113/305 (37.0) 128/305 (42.0) 1/305 (0.3) 26/305 (8.5) 0/305 (0.0) 4/305 (1.3) 33/305 (10.8)	38.4 (31.6, 45.2) 41.9 (35.3, 48.5) 0.4 (0.0, 1.0) 7.4 (4.5, 10.3) - 0.7 (0.1, 1.2) 11.2 (7.0, 15.4)
Income	< 5,000 Rupees 5,000-10,000 10,001-20,000 20,001-30,000 30,001-40,000 > 40,000 Rupees	9/305 (3.0) 6/305 (2.0) 33/305 (10.8) 123/305 (40.3) 59/305 (19.3) 75/305 (24.6)	2.7 (0.8, 4.6) 1.9 (0.3, 3.4) 8.6 (5.5, 11.8) 43.9 (37.0, 50.8) 18.9 (13.1, 24.8) 23.9 (18.0, 29.9)

Close to half of PWID in Colombo live in their parents' home (46.9%) and another 40.2% live in their own home. On average, PWID in Colombo live with three other people, and almost half (42.6%) share

their household with at least one child. Two in three PWID in Colombo are living with their partner/spouse (61.6%). Among male PWID in Colombo who are in a relationship/marriage, most (92.7%) are in a relationship with a woman.

**Table 199: Household information and family life**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Type of residence	Temporary shelter		9/305 (3.0)	2.2 (0.6, 3.8)
	Boarding house		36/305 (11.8)	9.5 (6.3, 12.7)
	Parents' home		136/305 (44.6)	46.9 (40.2, 53.7)
	My own home		121/305 (39.7)	40.2 (33.5, 46.9)
	Lodging		1/305 (0.3)	0.4 (0, 1.0)
	On the street		2/305 (0.7)	0.7 (0, 1.7)
	Brothel		0/305 (0.0)	-
	Other		0/305 (0.0)	-
Number of household members	Sample <i>M (SD) =</i> 4.1 (1.69) <i>Mdn =</i> 4 <i>N =</i> 300 <i>Range =</i> 1 – 13	Pop. est. <i>M (SD) =</i> 4.2 (1.63) <i>Mdn =</i> 4 - -	-	-
Number of children living in the household <sup>1</sup>	No children		162/287 (56.4)	57.4 (50.9, 63.9)
	One		60/287 (20.9)	19.4 (14.0, 24.8)
	Two		51/287 (17.8)	18.8 (13.3, 24.3)
	Three or more		14/287 (4.9)	4.4 (1.9, 7.0)
	Don't know		16/305 (5.2)	-
	Rather not say		1/305 (0.3)	-
Number of children	No children		180/290 (62.1)	62.3 (55.8, 68.9)
	One		46/290 (15.9)	15.7 (10.6, 20.8)
	Two		51/290 (17.6)	17.4 (12.5, 22.3)
	Three or more		13/290 (4.5)	4.6 (1.8, 7.4)
	Don't know		13/305 (4.3)	-
	Rather not say		2/305 (0.2)	-
Marital status	Single (Never married)		144/305 (47.2)	47.5 (40.5, 54.4)
	Married		129/305 (42.3)	41.3 (34.6, 47.9)
	Divorced/Separated		27/305 (8.9)	8.8 (5.2, 12.3)
	Widowed		5/305 (1.6)	2.5 (0.0, 5.1)
Cohabitation	Living together with a partner/ spouse		139/304 (45.7)	45.0 (38.4, 51.5)
	Involved in a relationship without living together		50/304 (16.4)	16.6 (11.7, 21.5)
	Have no relationship/Do not have a partner		115/304 (37.8)	38.4 (32.1, 44.8)
	Rather not say		1/305 (0.3)	-
Sex of partner <sup>2</sup>	Woman		173/189 (91.5)	92.1 (86.8, 97.3)
	Man		16/189 (8.5)	7.9 (2.7, 13.2)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Among men		
	Woman	167/180 (92.8)	92.7 (87.6, 97.8)
	Man	13/180 (7.2)	7.3 (2.2, 12.4)
	Among women		
	Woman	6/9 (66.7)	-
	Man	3/9 (33.3)	-

<sup>1</sup> One person reported they lived with 22 children. Their answer was treated as non-response. <sup>2</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### HIV and AIDS

About one-third of PWID in Colombo have never heard of HIV/AIDS (30.0%). Among those who have, half (51.4%) have received the most thorough information about HIV/AIDS from the health services. Among PWID in Colombo who have heard of HIV/AIDS, a majority (82.3%) have never discussed HIV/AIDS with any of their partners.

**Table 200: General knowledge about HIV/AIDS**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has heard of HIV/AIDS	Yes	215/296 (72.6)	70.0 (63.6, 76.3)
	Don't know	9/305 (3.0)	-
Main source of the most thorough understanding of HIV/AIDS	School	32/215 (14.9)	13.4 (8.1, 18.8)
	Health services	107/215 (49.8)	51.4 (43.3, 59.5)
	Workplace	3/215 (1.4)	1.3 (0, 2.8)
	Friends/Family	25/215 (11.6)	11.5 (6.9, 16.1)
	Television	16/215 (7.4)	9.3 (4.5, 14.1)
	Newspaper/Magazines	6/215 (2.8)	1.6 (0, 3.3)
	Posters/Billboards	4/215 (1.9)	2.2 (0.7, 3.8)
	Pamphlets/Leaflets	1/215 (0.5)	0.5 (0, 1.0)
	Radio	2/215 (0.9)	0.7 (0, 1.9)
	NGOs	19/215 (8.8)	8.0 (3.4, 12.6)
Discussed HIV with any sexual partner	Yes, all	16/215 (7.4)	7.2 (2.6, 11.9)
	Yes, some	16/215 (7.4)	8.5 (4.0, 13.0)
	No, none	180/215 (83.7)	82.3 (75.6, 88.9)
	Don't know	3/215 (1.4)	2.0 (0, 4.7)
Partner ever disclosed their HIV status <sup>1</sup>	Yes, all	14/32 (43.8)	(42.6 (13.2, 71.3))
	Yes, some	17/32(53.1)	(54.4 (25.6, 83.8))
	No, none	1/32 (3.1)	(2.9 (0, 7.7))
Knows somebody who is HIV-positive or has died of AIDS	Yes	96/215 (44.7)	44.0 (35.7, 52.2)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Close friend or relative died of AIDS	Yes, close relative	0/215 (0.0)	-
	Yes, close friend	14/215 (6.5)	4.8 (2.0, 7.6)
	Yes, close friend and relative	0/215 (0.0)	-
	No, none	198/215 (92.1)	93.0 (89.0, 97.0)
	Don't know	3/215 (1.4)	2.2 (0.0, 5.3)

A majority of PWID in Colombo cannot gauge their personal HIV risk (46.9%), and one in three (31.3%) believes that they are not at risk of HIV, because they trust their partners (79.7%). PWID in Colombo who perceive their HIV risk as moderate or high (19.9%) in most cases do so because they inject drugs (93.4%).

**Table 201: Perception of personal HIV risk**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Personal HIV risk	No risk	99/305 (32.5)	31.3 (25.1, 37.4)
	Low risk	9/305 (3.0)	1.9 (0.6, 3.3)
	Moderate risk	12/305 (3.9)	4.7 (1.8, 7.6)
	High risk	42/305 (13.8)	15.2 (10.3, 20.1)
	Don't know	143/305 (46.9)	46.9 (40.6, 53.3)
Reasons for perceiving the risk as moderate or high (multiple response)	Many sexual partners	5/54 (9.3)	8.0 (0.3, 15.8)
	Didn't always use condoms	2/54 (3.7)	4.3 (0.0, 10.1)
	Injected drugs	46/54 (85.2)	93.4 (88.3, 98.5)
	Partner has other partners	5/54 (9.3)	4.6 (0.0, 9.3)
Reasons for perceiving no or low risk (multiple response)	Trust my partner/s	83/106 (78.3)	79.7 (69.8, 89.5)
	Always use condoms	4/106 (3.8)	1.5 (0.2, 2.9)
	Other <sup>1</sup>	15/106 (14.2)	12.6 (5.9, 19.2)
	Don't know	6/106 (5.7)	7.0 (0.1, 14.1)
	Rather not say	2/108 (1.9)	-

<sup>1</sup> Answers include No partners/Unmarried (13/15); Use new needles (2/15)

Knowledge about HIV prevention is low among PWID in Colombo, with only one in ten (10.7%) PWID being able to correctly identify modes of sexual transmission of HIV and reject major misconceptions about transmission HIV. When looking at specific items that the composite indicator consists of, over half of PWID in Colombo know that that a healthy-looking person can have HIV (57.1%) and that the risk of getting HIV can be reduced by using a condom every time one has sex (56.6%). Only one-third (32.5%) also know that a person cannot get HIV sharing food with someone who is infected.

**Table 202: GAM 5.1 Knowledge about HIV prevention**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners	<u>Among all</u>		
	Yes	162/295 (54.9)	55.0 (49.6, 60.4)
	Rather not say	10/305 (3.3)	-
	<u>Among those aged 18 – 24<sup>2</sup></u>		
Yes	9/17 (52.9)	-	
Rather not say	1/18 (5.6)	-	
Person can reduce the risk of getting HIV by using a condom every time he/she has sex	<u>Among all</u>		
	Yes	169/293 (57.7)	56.6 (51.1, 62.0)
	Rather not say	12/305 (3.9)	-
	<u>Among those aged 18 – 24<sup>2</sup></u>		
Yes	7/17 (41.2)	-	
Rather not say	1/18 (5.6)	-	
Healthy-looking person can have HIV	<u>Among all</u>		
	Yes	181/295 (61.4)	57.1 (51.0, 63.1)
	Rather not say	10/305 (3.3)	-
	<u>Among those aged 18 – 24<sup>2</sup></u>		
Yes	8/17 (47.1)	-	
Rather not say	1/18 (5.6)	-	
Person cannot get HIV from mosquito bites	<u>Among all</u>		
	No	139/294 (47.3)	43.9 (37.9, 50.1)
	Rather not say	11/305 (3.6)	-
	<u>Among those aged 18 – 24<sup>2</sup></u>		
No	7/17 (41.2)	-	
Rather not say	1/18 (5.6)	-	
Person cannot get HIV by sharing food with someone who is infected	<u>Among all</u>		
	No	111/294 (37.8)	32.5 (26.2, 38.5)
	Rather not say	11/305 (3.6)	-
	<u>Among those aged 18 – 24<sup>2</sup></u>		
No	7/17 (41.2)	-	
Rather not say	1/18 (5.6)	-	
Composite indicator for knowledge about HIV prevention (1-5) <sup>1</sup>	<u>Among all</u>		
	# of correct answers		
	None	91/296 (30.7)	6.0 (1.6, 10.5)
	One	11/296 (3.7)	5.6 (2.6, 8.7)
	Two	19/296 (6.4)	10.7 (6.0, 15.3)
	Three	44/296 (14.9)	32.7 (25.3, 40.1)
	Four	74/296 (25.0)	34.2 (26.0, 42.6)
	Five	57/296 (19.3)	10.7 (5.5, 15.8)
	<u>Among those aged 18 - 24<sup>2</sup></u>		
	# of correct answers		
	None	7/17 (41.2)	-
	One	1/17 (5.9)	-
Two	0/17 (0.0)	-	

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Three	3/17 (17.6)	-
	Four	2/17 (11.8)	-
	Five	4/17 (23.5)	-
HIV can be transmitted from mother to her unborn child	Yes	205/304 (67.4)	63.7 (56.8, 70.7)
	Rather not say	1/305 (0.3)	-
Ever heard of ART	Yes	156/305 (51.1)	48.4 (41.8, 54.9)

<sup>1</sup> Don't know is recorded as incorrect. Numerator for individual and the composite indicator excludes those who have never heard of HIV/AIDS, while all who had a valid answer to the question regarding whether they had ever heard of HIV/AIDS are included in the denominator. <sup>2</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

Among PWID in Colombo who have ever heard of HIV/AIDS, over half (53.6%) exhibit a discriminatory attitude towards PLHIV, with somewhat fewer saying that they would not buy fresh vegetables from a shopkeeper or vendor if she knew that this person had HIV (52.7%) than saying that they think children living with HIV should not be able to attend school with children who are HIV negative (67.1%).

**Table 203: GAM 4.1 Discriminatory attitudes towards PLHIV**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Thinks that children living with HIV should be able to attend school with children who are HIV negative?	<u>Among all</u>		
	Yes	146/208 (70.2)	67.1 (58.9, 75.1)
	No	62/208 (29.8)	33.0 (24.9, 41.1)
	Don't Know/Not sure/It depends	6/215 (2.8)	-
	Rather not say	1/215 (0.5)	-
	<u>Among those aged 18-49</u>		
	Yes	107/156 (68.6)	63.8 (54.3, 73.0)
	No	49/156 (31.4)	36.2 (27.0, 45.7)
	Don't know/Not sure/It depends	3/159 (1.9)	-
	<u>Among those aged 25-49 years</u>		
	Yes	103/146 (70.5)	65.2 (55.6, 74.5)
	No	43/146 (29.5)	34.9 (25.5, 44.4)
Don't know/Not sure/It depends	3/149 (2.0)	-	
Would buy fresh vegetables from a shopkeeper or vendor if he/she knew that this person had HIV?	<u>Among all</u>		
	Yes	113/208 (54.3)	52.7 (44.2, 61.2)
	No	95/208 (45.7)	47.3 (38.8, 55.8)
	Don't Know/Not sure/It depends	7/215 (3.3)	-
	<u>Among those aged 18-49</u>		
	Yes	86/157 (54.8)	53.1 (43.0, 63.2)
No	71/157 (45.2)	46.9 (36.8, 57.0)	
Don't know/Not sure/It depends	2/159 (1.3)	-	

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	<u>Among those aged 25-49 years</u>		
	Yes	83/148 (56.1)	54.0 (43.8, 64.2)
	No	65/148 (43.9)	46.0 (35.9, 56.2)
	Don't know/Not sure/It depends	1/149 (0.7)	-
Composite indicator for discriminatory attitudes towards PLHIV (1-2) <sup>1</sup>	Responded 'No' to either of the two questions		
	<u>Among all</u>	111/215 (51.6)	53.6 (45.6, 61.6)
	<u>Among those aged 18-49</u>	84/159 (52.8)	56.3 (46.9, 65.7)
	<u>Among those aged 25-49</u>	77/149 (51.7)	55.6 (45.9, 65.4)

<sup>1</sup> Participants who responded don't know/not sure/it depends and those who refused to answer were excluded from the analysis. Numerator: Number of respondents who respond no to either of the two questions; Denominator: Number of all respondents who have heard of HIV.

Only one in three (32.3%) PWID in Colombo know where to receive an HIV test, with a majority (88.5%) mentioning government STI clinic as a place that they know offers an HIV test. Although 16.7% of PWID in Colombo have ever tested for HIV, as few as 7.7% of have received an HIV test within 12 months before the survey was carried out. Among those who ever did receive an HIV test, most (85.7%) have received their last HIV test at a government non-STI clinic.

**Table 204: HIV testing**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Knows where to receive an HIV test	Yes	113/305 (37.0)	32.3 (26.2, 38.4)
Places that offer HIV testing (multiple response)	Government clinic – STI	101/113 (89.4)	88.5 (81.2, 95.8)
	Government clinic – non-STI	7/113 (6.2)	4.6 (0.9, 8.2)
	Private clinic	16/113 (14.2)	14.7 (6.3, 23.0)
	Private pharmacy or chemist	7/113 (6.2)	3.6 (0.9, 6.2)
	Traditional healer/herbalist	2/113 (1.8)	1.2 (0.0, 2.9)
	Don't know any	2/113 (1.8)	1.9 (0.0, 4.4)
Knows HIV status from an HIV test	No, I have never been tested	246/299 (82.3)	83.3 (77.9, 88.6)
	Yes, I have been tested	53/299 (17.7)	16.7 (11.4, 22.1)
	Rather not say	6/305 (2.0)	-
Last HIV test	< 6 months	16/52 (30.8)	25.8 (8.5, 42.2)
	6 – 12 months	13/52 (25.0)	20.8 (9.4, 31.4)
	> 12 Months	23/52 (44.2)	53.5 (37.6, 70.9)
	Rather not say	1/53 (0.3)	-
Result of last HIV test	Negative	51/52 (98.1)	99.1 (97.3, 100)
	Positive	0/52 (0.0)	-
	Indeterminate	0/52 (0.0)	-
	Didn't receive the result	0/52 (0.0)	-
	Don't know	1/52 (1.9)	0.9 (0.0, 2.7)
	Rather not say	1/53 (0.3)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Composite indicator for knowledge of HIV status (1-3 <sup>1</sup> )		29/299 (9.7)	7.7 (4.2, 11.2)
Last HIV test was voluntary	Yes No Rather not say	51/52 (98.1) 1/52 (1.9) 1/53 (0.3)	98.1 (98.1, 98.1) 1.9 <sup>2</sup>
Place where last HIV test was received	Government clinic – STI Government clinic – non-STI Private clinic Private pharmacy or chemist Traditional healer/herbalist Rather not say	44/52 (84.6) 1/52 (1.9) 3/52 (5.8) 4/52 (7.7) 0/52 (0.0) 1/53 (0.3)	85.7 (79.4, 91.9) 1.3 <sup>2</sup> 6.9 <sup>2</sup> 6.1 (0.0, 12.2) - -

<sup>1</sup> Numerator: Number of respondents who tested HIV-positive or who tested in the past 12 months and the result was negative; Denominator: Number of respondents who provided a valid answer to the question about their knowledge about their HIV status from an HIV test. <sup>2</sup> Confidence intervals cannot be calculated.

Among PWID in Colombo who have never received an HIV test, a majority say it was because they do not know where to go (66.2%). Some also believe they are not at risk of HIV (14.2%) or because they trust their partner (13.8%). Importantly, over half of PWID in Colombo (56.4%) avoid HIV services because of stigma and discrimination, namely due to fear or concern about fear or concern about stigma by staff and neighbours (37.4%) and because of fear of or concern about or experienced police harassment or arrest (18.3%).

**Table 205: Reasons for never receiving an HIV test**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Reasons for never receiving an HIV test (multiple response)	Don't know where to go	148/245 (60.4)	66.2 (59.4, 72.8)
	I always use condoms	3/245 (1.2)	(0.7 (0.0, 1.5)
	Not at risk of getting HIV	42/245 (17.1)	14.2 (8.9, 19.5)
	Didn't have time/Too busy	13/245 (5.3)	5.4 (2.1, 8.6)
	I trust my partner	35/245 (14.3)	13.8 (8.6, 18.9)
	Afraid of knowing I may be HIV-positive	3/245 (1.2)	1.0 (0.0, 2.2)
	Lack of confidentiality	3/245 (1.2)	1.1 (0.0, 2.3)
	Inconvenient testing location	13/245 (5.3)	4.2 (1.8, 6.6)
	No money	0/245 (0.0)	-
	Don't know	19/245 (7.8)	5.9 (3.2, 8.7)
	Rather not say	1/246 (0.4)	-
Never receiving an HIV test because of stigma and discrimination (multiple response)	Fear or concern about stigma by staff or neighbours	94/243 (38.7)	37.4 (30.0, 44.9)
	Fear of or concern about or experienced violence	9/243 (3.7)	(2.0 (0.4, 3.7)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Fear of or concern about or experienced police harassment or arrest	40/243 (16.5)	18.3 (12.3, 24.3)
	Rather not say	3/246 (1.2)	-
Composite indicator for avoidance of HIV services because of stigma and discrimination (1-3)		136/243 (56.0)	56.4 (49.0, 63.8)

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Alcohol and Drugs

Fewer than half of PWID in Colombo (46.1%) have ever had a drink containing alcohol. Among those who have, about one-third (37.2%) drank alcohol at least once a week during the month before the survey.

**Table 206: Alcohol consumption**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had a drink containing alcohol	Yes	154/302 (50.1)	46.1 (39.5, 52.7)
	Don't know	3/305 (1.0)	-
Alcohol consumption in the past month	I never drink alcohol	0/154 (0.0)	-
	At least once a week	51/154 (33.1)	37.2 (28.1, 46.7)
	Less than once a week	57/154 (37.0)	35.6 (26.2, 45.0)
	Never in the past month	40/154 (26.0)	24.5 (17.0, 31.8)
	Every day	6/154 (3.9)	2.8 (0.6, 4.8)

Most commonly, PWID in Colombo inject drugs either in their own house (61.7%), or in somebody else's house (58.8). About one in five (19.2%) injects drugs in a drug dealer's house. Very few inject drugs in public places, such as in abandoned buildings (20.1%) or in streets/parks/beaches (7.0%), although as many as two-thirds (69.2%) visit outdoor sites (streets, parks, bars) in order to buy drugs and socialize with other PWID.

**Table 207: Locations where drugs are injected**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Most common locations where drugs are injected (up to two responses)	My house	180/305 (59.0)	61.7 (54.8, 68.6)
	The house of another person who injects	179/305 (58.7)	58.8 (51.8, 65.9)
	The house of a drug dealer	69/305 (22.6)	19.2 (14.8, 23.5)
	An abandoned building	64/305 (20.1)	20.1 (14.9, 25.4)
	Public restroom	7/305 (2.3)	1.7 (0.3, 3.0)
	Prison	2/305 (0.7)	0.2 (0.0, 0.5)
	Street/park/beach	23/305 (7.5)	7.0 (3.8, 10.3)
	Shop/café/bar	3/305 (1.0)	0.5 (0.0, 1.0)
	Workplace	3/305 (1.0)	0.5 (0.0, 1.0)
Visits outdoor sites (streets, parks, bars) in order to buy drugs and socialize with other PWID		225/304 (74.0)	69.2 (62.5, 75.8)

On average, PWID in Colombo were 24 years old the first time they injected non-prescribed/illicit drugs, with as many as one in five (18.8%) PWID in Colombo being younger than 18 years of age at first injection of non-prescribed/illicit drugs. On average, PWID in Colombo have been injecting drugs for over 17 years, with as many as two-thirds of (65.0%) injecting drugs for 11 years or longer.

**Table 208: Length of time injecting non-prescribed/illicit drugs**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age at first injection of non-prescribed / illicit drugs? (including self-injecting or injecting by others)	Sample <i>M (SD)</i> = 24.6 (8.39) Mdn = 22.0 <i>N</i> = 304 Range = 12 – 68	Pop. est. <i>M (SD)</i> = 24.4 (8.66) Mdn = 22.0 - -	-	-
	< 18		50/304 (16.4)	18.8 (13.4, 24.3)
Length of time injecting non-prescribed/illicit drugs	Sample <i>M (SD)</i> = 17.4 (10.85) Mdn = 15.0 <i>N</i> = 296 Range = 1 – 50	Pop. est. <i>M (SD)</i> = 17.4 (10.90) Mdn = 17.5 - -	-	-
	< 1 Year 1 – 10 years 11 years or more		0/296 (0.0) 105/296 (35.5) 191/296 (64.5)	- 35.0 (27.8, 42.0) 65.0 (58.0, 72.2)

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

In the year preceding the survey, most PWID in Colombo have injected drugs four or more times a week (80.0%), with all of them having injected heroin. Use of drugs other than heroin is not common, except for use of cannabis, in the years preceding the survey used by 16.8% of PWID in Colombo.

**Table 209: Use of drugs in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Frequency of injecting drugs	Monthly or less	3/300 (1.0)	0.9 (0.0, 2.2)
	Two to four times a month	23/300 (7.7)	7.0 (4.0, 10.0)
	Two to three times a week	37/300 (12.3)	12.1 (7.8, 16.4)
	Four or more times a week	237/300 (79.0)	80.0 (74.6, 85.4)
	Don't know	3/305 (1.0)	-
	Rather not say	2/305 (0.7)	-
Type of drug that was injected (multiple response)	Heroin	305/305 (100)	-
	Cocaine	2/305 (0.7)	0.5 (0.0, 1.2)
	Crack cocaine	1/305 (0.3)	0.1 (0.0, 0.1)
	Churus / Ash	9/305 (2.9)	3.2 (0.4, 6.1)
	Methamphetamine, amphetamine	0/305 (0.0)	-
	Ganja Mal	5/305 (1.6)	2.2 (0.0, 4.8)
	Methadone	1/305 (0.3)	0.3 (0.0, 0.7)
	Kerala Ganja	3/305 (1.0)	1.2 (0.0, 2.6)
	Ganja	4/305 (1.3)	2.2 (0.0, 5.3)
	Sudol (Tablet)	6/305 (2.0)	2.5 (0.0, 5.0)
	Rifernol (Tablet)	2/305 (0.7)	0.7 (0.0, 1.7)
Other <sup>1</sup>	4/305 (1.3)	0.9 (0.1, 1.7)	
Type of drug used in the past 12 months			
Heroin	<i>Frequency of consumption</i>		
	Never in the past 12 months	5/304 (1.6)	0.6 (0.0, 1.1)
	Monthly or less	2/304 (0.7)	0.3 (0.0, 0.6)
	Several times a month	18/304 (5.9)	5.8 (2.4, 9.3)
	Two to four times a month	14/304 (4.6)	4.7 (2.7, 7.2)
	Two to three times a week	34/304 (11.2)	11.4 (7.0, 15.8)
	Four or more times a week	231/304 (76.0)	77.1 (71.4, 82.8)
	Rather not say	1/305 (0.3)	-
	<i>Mode of consumption</i>		
	Smoke	0/299 (0.0)	-
	Swallow/Ingest	0/299 (0.0)	-
	Snort/Sniff	0/299 (0.0)	-
	Inject	298/299 (99.7)	98.9 (97.0, 100)
Don't know	1/299 (0.3)	-	
Cannabis <sup>2</sup>	<i>Frequency of consumption</i>		
	Never in the past 12 months	196/301 (65.1)	66.4 (59.2, 73.6)
	Monthly or less	5/301 (1.7)	1.1 (0.1, 2.2)
	Several times a month	1/301 (0.3)	0.3 (0.0, 0.6)
Two to four times a month	2/301 (0.7)	0.4 (0.0, 0.7)	

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Two to three times a week	12/301 (4.0)	4.1 (1.1, 7.1)
	Four or more times a week	39/301 (13.0)	10.9 (7.1, 14.7)
	Don't know	46/301 (15.3)	16.8 (19.0, 23.7)
	Rather not say	4/305 (1.3)	
	<i>Mode of consumption</i>		
	Smoke	51/59 (86.4)	89.4 (81.7, 97.0)
	Swallow/Ingest	0/59 (0.0)	-
	Snort/Sniff	1/59 (1.7)	1.1 (0.0, 3.0)
	Inject	2/59 (3.4)	1.0 (0.0, 1.9)
	Don't know	1/59 (1.7)	3.6 (0.0, 9.8)
	Did not use	4/59 (6.8)	4.9 (0.6, 9.2)
Cocaine <sup>2,3</sup>	<i>Frequency of consumption</i>		
	Never in the past 12 months	247/299 (82.6)	81.5 (74.1, 88.9)
	Monthly or less	0/299 (0.0)	-
	Several times a month	1/299 (0.3)	0.2 (0.0, 0.5)
	Two to four times a month	0/299 (0.0)	-
	Two to three times a week	0/299 (0.0)	-
	Four or more times a week	1/299 (0.3)	0.1 (0.0, 0.3)
	Don't know	50/299 (16.7)	18.2 (10.7, 25.6)
	Rather not say	6/305 (2.0)	-
	<i>Mode of consumption</i>		
	Smoke	-	-
	Swallow/Ingest	-	-
	Snort/Sniff	-	-
Inject	1/1 (100)	-	
Did not use	1/2 (50.0)	-	
Ecstasy <sup>2</sup>	<i>Frequency of consumption</i>		
	Never in the past 12 months	248/295 (84.1)	82.7 (75.5, 89.8)
	Monthly or less	0/295 (0.0)	-
	Several times a month	0/295 (0.0)	-
	Two to four times a month	0/295 (0.0)	-
	Two to three times a week	0/295 (0.0)	-
	Four or more times a week	0/295 (0.0)	-
	Don't know	47/295 (15.9)	17.3 (10.2, 24.5)
	Rather not say	10/305 (3.3)	-
	<i>Mode of consumption</i>		
	Smoke	-	-
	Swallow/Ingest	-	-
	Snort/Sniff	-	-
Inject	-	-	
Amphetamines <sup>2</sup>	<i>Frequency of consumption</i>		
	Never in the past 12 months	248/295 (84.1)	82.7 (75.4, 89.9)
	Monthly or less	0/295 (0.0)	-
	Several times a month	0/295 (0.0)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Two to four times a month	0/295 (0.0)	-
	Two to three times a week	0/295 (0.0)	-
	Four or more times a week	0/295 (0.0)	-
	Don't know	47/295 (15.9)	17.3 (10.1, 24.6)
	Rather not say	10/305 (3.3)	-
	<i>Mode of consumption</i>		
	Smoke	-	-
	Swallow/Ingest	-	-
	Snort/Sniff	-	-
	Inject	-	-
Opium <sup>2</sup>	<i>Frequency of consumption</i>		
	Never in the past 12 months	248/295 (84.1)	82.6 (75.5, 98.9)
	Monthly or less	0/295 (0.0)	-
	Several times a month	0/295 (0.0)	-
	Two to four times a month	0/295 (0.0)	-
	Two to three times a week	0/295 (0.0)	-
	Four or more times a week	0/295 (0.0)	-
	Don't know	47/295 (15.9)	17.4 (10.1, 24.5)
	Rather not say	10/305 (3.3)	-
	<i>Mode of consumption</i>		
	Smoke	-	-
	Swallow/Ingest	-	-
	Snort/Sniff	-	-
Inject	-	-	
Hashish <sup>2,3</sup>	<i>Frequency of consumption</i>		
	Never in the past 12 months	247/296 (83.4)	82.3 (75.2, 89.5)
	Monthly or less	1/296 (0.3)	0.1 (0.0, 0.3)
	Several times a month	0/296 (0.0)	-
	Two to four times a month	1/296 (0.3)	0.2 (0.0, 0.4)
	Two to three times a week	0/296 (0.0)	-
	Four or more times a week	0/296 (0.0)	-
	Don't know	47/296 (15.9)	17.3 (10.3, 24.3)
	Rather not say	9/305 (3.0)	-
	<i>Mode of consumption</i>		
	Smoke	0/1 (0.0)	-
	Swallow/Ingest	0/1 (0.0)	-
	Snort/Sniff	0/1 (0.0)	-
	Inject	0/1 (0.0)	-
	Did not use	0/1 (0.0)	-
Don't know	1/1 (100)	-	
Rather not say	1/2 (50.0)	-	

<sup>1</sup> Morphine <sup>2</sup> There is a significant proportion of the response 'Don't know.' Although it is possible that it refers to not knowing the frequency of drug use, it is more likely that it indicates never have heard of the particular type of drug. <sup>3</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported.

Almost all PWID in Colombo have injected drugs in the month preceding the survey (91.8%), with most injecting drugs on average twice a day (71.9%). At last injection in the past one month, 80.5% of PWID in Colombo used a sterile needle and syringe.

**Table 210: Use of drugs in the past month**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Injected drugs in the past month	Yes	287/304 (94.4)	91.8 (87.1, 96.4)
	Rather not say	1/305 (0.3)	-
Number of times injecting drugs in an average day (in the past 30 days)	Once	50/286 (17.5)	17.0 (12.3, 21.8)
	Twice	200/286 (69.9)	71.9 (66.0, 77.7)
	Three times	33/286 (11.5)	10.6 (6.3, 14.8)
	Four times	1/286 (0.3)	0.3 (0, 0.7)
	More than four times	2/286 (0.7)	0.3 (0, 0.5)
	Don't know	1/287 (0.3)	-
Safe injecting practice <sup>1</sup>	Yes	227/287 (79.1)	80.5 (75.3, 85.7)

<sup>1</sup> % Used a sterile needle and syringe at last injection in the past one month.

Almost all PWID in Colombo can access new, unused needle and syringe every time they need to (95.3%), most commonly at pharmacies (94.2%).

**Table 211: Access to clean injecting equipment (needles and syringes)**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Can access new, unused needle and syringe every time they need to	Yes	295/304 (97.0)	95.3 (91.8, 98.9)
	No	9/304 (3.0)	4.7 (1.1, 8.2)
	"Have not tried"	1/305 (0.3)	-
Barriers to access (multiple response) <sup>1</sup>	Needles/syringes too expensive	2/9 (22.2)	-
	Vendor/needle seller closed or not around	3/9 (33.3)	-
	Preferred size not available	2/9 (22.2)	-
	Vendor ran out/stock out	0/9 (0.0)	-
	Vendor too far away	2/9 (22.2)	-
	Do not know where to get	0/9 (0.0)	-
	Retailers refuse to sell to me	0/9 (0.0)	-
	Don't know	1/9 (11.1)	-
Main source of new, unused injecting equipment	Pharmacy	279/295 (94.6)	94.2 (90.6, 97.9)
	Chemist's shop	0/295 (0.0)	-
	Drug dealer	0/295 (0.0)	-
	Another person who injects	13/295 (4.4)	5.1 (1.5, 8.7)
	Health worker	0/295 (0.0)	-
	Drop-in centre	0/295 (0.0)	-
	Family or relative or spouse	0/295 (0.0)	-
	Sex partner	1/295 (0.3)	0.1 (0.0, 0.3)
	Friends	2/295 (0.7)	0.5 (0.0, 1.3)

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

As many as two-thirds of PWID in Colombo have ever shared injecting equipment with others (61.9%), although at last injection, most did use sterile injecting equipment (77.0%).

**Table 212: Unsafe injection**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever shared injecting equipment <sup>1</sup> with others	Yes	187/305 (61.3)	61.9 (55.0, 68.7)
Shared injecting equipment at last injection	Yes	170/305 (55.7)	58.7 (51.3, 66.0)
Used sterile injecting equipment at last injection	Yes	232/305 (76.1)	77.0 (71.5, 82.4)

<sup>1</sup> Injecting equipment encompasses needles and syringes.

Among PWID in Colombo who had ever injected drugs with someone (65.5%), most have injected drugs with a friend or acquaintance (94.3%). Slightly fewer than half, however, did not know or ask about the HIV status of the last person they injected drugs with (41.4%).

**Table 213: Unsafe injection (with others)**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever injected drugs with someone	Yes	198/304 (65.1)	65.5 (58.6, 72.4)
	Don't remember	1/305 (0.3)	-
Relationship to the last person they injected drugs with	Sex partner	3/198 (1.5)	0.9 (0.0, 1.7)
	Friend or acquaintance	185/198 (93.4)	94.3 (91.3, 97.4)
	Relative	1/198 (0.5)	0.1 (0.0, 2.5)
	Drug dealer	0/198 (0.0)	-
	Fixer	5/198 (2.5)	2.1 (0.0, 4.1)
	Fellow prisoner	4/198 (2.0)	1.8 (0.1, 3.4)
	Stranger	-	-
HIV status of the last person they injected drugs with	HIV-negative	122/198 (61.6)	58.6 (50.1, 66.2)
	HIV-positive	0/198 (0.0)	-
	Don't know/Didn't ask	76/198 (38.4)	41.4 (33.8, 49.3)
At last injection with someone:			
Injected with a completely new, unused needle/syringe that no one else including you had used	Yes	164/198 (82.8)	83.1 (76.4, 89.8)
Injected with a needle/syringe that was used previously by you and no one else	Yes	156/198 (78.8)	79.3 (72.9, 85.8)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Used a needle/syringe after someone else had injected with it	Yes	142/198 (71.7)	70.7 (63.2, 78.0)
Received an injection from a 'fixer', or injected from a pre-filled syringe	Yes	65/193 (33.7)	29.6 (22.0, 36.8)
	Don't know	5/198 (2.5)	-
Injected using a syringe that someone else had squirted drugs into from his/her used syringe	Yes	103/197 (52.3)	44.2 (36.2, 51.7)
	Don't know	1/198 (0.5)	-
Injected blood from someone else who had recently injected drugs (flashblood)	Yes	5/195 (2.6)	-
	Don't know	3/198 (1.5)	-
Passed on the needle/syringe to others after you injected with it	Yes	137/197 (69.5)	63.5 (55.3, 71.3)
	Don't know	1/198 (0.5)	-
Composite indicator for unsafe injection with another person (3-7)	# of "Yes" answers		
	None	28/198 (14.1)	16.2 (10.0, 22.5)
	One	38/198 (19.2)	20.7 (13.7, 27.7)
	Two	35/198 (17.7)	21.6 (14.5, 28.8)
	Three	45/198 (22.7)	21.5 (15.0, 27.9)
	Four	51/198 (25.8)	19.7 (13.8, 25.6)
	Five	1/198 (0.5)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

PWID in Colombo have on average been arrested four times for injecting drugs or being in possession of drugs. Only one in ten (8.0%) PWID in Colombo has not ever been arrested for injecting drugs or being in possession of drugs. Among PWID who have ever been in jail/prison, few have also injected drugs while in jail/prison (9.5%).

**Table 214: Drug-related arrests and incarceration**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of arrests for injecting drugs or being in possession of drugs	Sample	Pop. est.		
	M (SD) = 3.7 (3.15) Mdn = 3.0 N = 299 Range = 0 – 20	M (SD) = 3.6 (3.13) Mdn = 3.0 - -		
	None		26/299 (8.7)	8.0 (4.6, 11.4)
	Once		38/299 (12.7)	15.4 (9.7, 21.0)
	Twice		71/299 (23.7)	23.7 (18.2, 29.3)
	Three or more times		164/299 (54.8)	52.9 (46.3, 59.6)
	Rather not say		6/305 (2.0)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever injected drugs in jail/prison	Yes	36/276 (13.0)	9.5 (6.2, 12.7)
	No	240/276 (87.0)	90.5 (87.3, 93.8)
	Don't know	2/305 (0.7)	-
	Never been to jail/prison	27/305 (8.9)	-
Shared needle, syringe or other injecting equipment at last injection in jail/prison <sup>1</sup>	Yes	26/36 (72.2)	(72.9 (50.5, 95.6))

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Sexual Behaviour

Four in five PWID in Colombo have ever had vaginal sex or anal sex with a man (79.7%). Among men, much more PWID in Colombo have had vaginal (78.6%) than anal sex with a man (14.6%).

**Table 215: General sexual history**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had vaginal or anal sex		248/305 (81.3)	79.7 (73.8, 85.4)
Ever had vaginal sex <sup>1</sup>	Among all	240/305 (78.7)	78.0 (72.3, 83.7)
	Among women	9/14 (64.3)	-
	Among men	231/291 (79.4)	78.6 (72.5, 84.9)
Ever had anal sex with a man <sup>1</sup>	Among all	50/305 (16.4)	15.0 (10.6, 19.3)
	Among women	2/14 (14.3)	-
	Among men	48/291 (16.5)	14.6 (10.2, 19.0)

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

Two thirds of PWID in Colombo have had a sexual partner in the 12 months before the survey (63.7%). Among them, half have had only one sexual partner (55.5%). Among men who have had a sexual partner in the 12 months before the survey, 14.6% have had a male sexual partner. Among men who have had a female sexual partner in the part 12 months, most (78.4%) have never used a condom during vaginal sex with women.

**Table 216: Sexual partners in the past 12 months**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Had a sexual partner in the past 12 months (anal or vaginal intercourse)	Yes		202/304 (66.4)	63.7 (57.0, 70.3)
	Don't know		1/305 (0.3)	-
Number of sexual partners in the past 12 months (anal or vaginal intercourse)	Sample <i>M (SD)</i> 2.8 (3.39) Mdn = 1.0 <i>N</i> = 202 Range = 1 - 25	Pop. est. <i>M (SD)</i> 2.7 (3.19) Mdn = 1.0 -	-	-
	1		106/202 (52.5)	55.5 (48.0, 63.6)
	2 or more		96/202 (47.5)	44.4 (36.4, 52.0)
Had a male sexual partner in the past 12 months <sup>1</sup>	Among women		2/8 (25.0)	-
	Don't know		1/9 (11.1)	-
	Among men		29/180 (16.1)	14.6 (7.9, 21.3)
	Don't know		4/193 (2.1)	-
	Rather not say		9/193 (4.7)	-
Number of male sexual partners in the past 12 months (anal or vaginal intercourse) <sup>1</sup>				
Among women	Sample <i>N</i> = 2 Range = 1 - 10	Pop. est. - -	-	-
Among men	Sample <i>N</i> = 29 <i>M (SD)</i> = 5.2 (4.27) Mdn = 3 Range = 1 - 15	Pop. est. <i>(M (SD)</i> 5.9 (4.81)) <i>(Mdn<sup>1</sup> = 5)</i> -	-	-
Among men	1		6/29 (20.7)	(18.8 (13.4, 24.3))
	2		7/29 (24.1)	(26.6 (9.6, 43.6))
	3 or more		16/29 (55.2)	(54.7 (36.6, 72.6))
Use of condoms during vaginal sex with women in the past 12 months (among men who had a female sexual partner in the past 12 months)	Every time		16/167 (9.6)	7.7 (3.7, 11.6)
	Almost every time		15/167 (9.0)	6.6 (3.3, 10.0)
	Sometimes		15/167 (9.0)	7.3 (3.0, 11.6)
	Never		121/167 (72.5)	78.4 (71.9, 84.9)
	Did not have sex with a woman		13/193 (6.7)	-
	Don't know/Rather not say		13/193 (6.7)	-
Use of condoms during sex with men in the past 12 months <sup>1</sup>	Every time		1/2 (50.0)	-
	Almost every time		-	-
	Sometimes		1/2 (50.0)	-
Among women	Never		-	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Among men	Every time	6/28 (21.4)	(15.2 (1.6, 29.0))
	Almost every time	7/28 (25.0)	(33.0 (7.2, 58.7))
	Sometimes	7/28 (25.0)	(25.7 (1.4, 50.1))
	Never	7/28 (25.0)	(24.1 (7.2, 40.6))
	Don't know	1/28 (3.6)	(2.1 (0, 5.4))
	Rather not say	1/29 (3.4)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses

Among PWID in Colombo who have ever had vaginal sex or anal sex with men, about one in ten (9.7%) has ever received money, goods or services (9.7%) or drugs (10.3%) in exchange for sex. About the same proportion (11.7%) have ever given money, goods or services in exchange for sex.

**Table 217: Transactional sex**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had vaginal or anal sex		248/305 (81.3)	79.7 (73.8, 85.4)
Ever received money, goods or services in exchange for sex	Yes	30/246 (12.2)	9.7 (5.8, 13.6)
	Don't remember	2/248 (0.8)	-
Ever had sex in order to obtain drugs	Yes	32/246 (13.0)	10.3 (6.3, 14.2)
	Don't remember	2/248 (0.8)	-
Ever given money, goods or services in exchange for sex	Yes	30/248 (12.1)	9.7 (5.8, 13.6)
Gave money, goods or services in exchange for sex with a female sex worker in the past 12 months (among men)	Yes	27/193 (14.0)	11.7 (6.4, 16.8)
	Don't remember	1/194 (0.5)	-
Used a condom at last sex with a female sex worker in the past 12 months (among men) <sup>1</sup>	Yes	18/27 (66.7)	(68.7 (55.5, 82.3))

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses

Focusing on the last sexual partner, among male PWID in Colombo who ever had vaginal sex or anal sex with a man, for most, their last sexual partner was a woman (94.3%), somebody they were seeing regularly (88.0%), and somebody who does not inject drugs (85.7%). Importantly, as many as one in four (26.8%) PWID in Colombo did not know or ask their last sexual partner about his or her HIV status. Among the PWID who had in the last 30 days both injected drugs and had a sexual partner, only one quarter (25.9%) used a condom at last sex.

**Table 218: Last Sexual Partner**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had vaginal or anal sex		248/305 (81.3)	79.7 (73.8, 85.4)
Partner's sex <sup>1</sup>	Woman	222/240 (92.5)	93.8 (90.1, 97.6)
	Man	18/240 (7.5)	6.2 (2.4, 9.8)
	Rather not say	8/248 (3.2)	-
	Among women		
	Woman	8/10 (80.0)	-
	Man	2/10 (20.0)	-
	Among men		
Woman	214/230 (93.0)	94.3 (90.8, 97.9)	
Man	16/230 (7.0)	5.7 (2.1, 9.2)	
Type of partner	Regular	197/228 (86.4)	88.0 (83.5, 92.6)
	Casual	23/228 (10.1)	8.8 (5.3, 12.3)
	Paying partner	3/228 (1.3)	1.6 (0.0, 3.4)
	Paid partner	0/228 (0.0)	-
	Don't know	5/228 (2.2)	1.6 (0.1, 3.1)
	Rather not say	20/248 (8.1)	-
	Partner's HIV status	HIV-negative	178/242 (73.6)
HIV-positive		0/242 (0.0)	-
I don't know / Didn't ask		64/242 (26.4)	26.8 (20.6, 33.1)
Rather not say		6/248 (2.4)	-
Used a condom at last sex	Yes	64/237 (27.0)	25.5 (19.2, 31.8)
	No	173/237 (73.0)	74.4 (68.2, 80.1)
	Don't remember	3/241 (1.7)	-
	Rather not say	7/248 (2.8)	-
Partner injects drugs	Yes	35/244 (14.3)	13.2 (8.2, 18.1)
	No	205/244 (84.0)	85.7 (0.7, 90.8)
	Don't know	4/244 (1.6)	1.1 (0.2, 2.0)
	Rather not say	4/248 (1.6)	-
Had a sexual partner in the past 30 days	Yes	182/305 (59.7)	57.5 (50.9, 64.2)
3.6C Condom use among PWID <sup>1</sup>	Yes	48/172 (27.9)	25.9 (18.3, 33.5)
	Don't remember	2/176 (1.1)	-
	Rather not say	2/176 (1.1)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

Among male PWID who had sex in the past 12 months, slightly over half (55.2%) were in a relationship. Condom use at last sex with a spouse/regular partner is low, with only one in four (22.8%) having had used a condom at last sex.

**Table 219: Sexual activity with a spouse/regular partner in the past 12 months (among male PWID)**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Had a spouse/regular sexual partner	Yes		167/290 (57.6)	55.2 (48.3, 62.1)
	Rather not say		1/291 (0.3)	-
Used a condom at last sex	Yes		43/164 (26.2)	22.8 (15.8, 29.5)
	No		121/164 (73.8)	77.1 (70.4, 84.2)
	Didn't have sex with spouse / regular partner in the past 12 months		1/167 (0.6)	-
	Rather not say		2/167 (1.2)	-
Mean number of sex acts per week	Sample <i>M (SD)</i> 3.1 (1.97) Mdn = 2.0 <i>N</i> = 159 Range 0 - 10	Pop. est. <i>M (SD)</i> 3.0 (1.88) Mdn = 2.0	-	-

### Use of Condoms and Lubricants

Most PWID in Colombo have ever heard of condoms (94.0%). Among them almost all also know where to obtain condoms (99.6%). Most commonly, PWID in Colombo obtain condoms at pharmacies (77.0%) or government STD clinics (20.5%) and most PWID in Colombo find condoms to be affordable (58.3%) or somewhat affordable (24.6%). Much fewer PWID in Colombo have ever heard of lubricants (16.4%) and among them, fewer than half ever use lubricants (36.8%).

**Table 220: Use of condoms and lubricants**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of condoms	Yes	285/304 (93.8)	94.0 (91.3, 96.7)
	No	19/304 (6.2)	-
	Rather not say	1/305 (0.3)	-
Knows where to obtain condoms	Yes	283/285 (99.3)	99.6 (99.20, 100)
	No	2/285 (0.7)	-
Usually obtains condoms from: (multiple response)	Government clinic - STD clinic	56/283(19.8)	20.5 (14.1, 26.9)
	Govt. clinic - Not STD clinic	3/283 (1.1)	1.1 (0.0, 2.5)
	Private clinic	21/283 (7.4)	6.8, 3.4 10.1)
	Private pharmacy or chemist	218/283 (77.0)	77.0 (70.7, 83.4)
	Traditional healer/herbalist	12/283 (4.2)	5.0 (1.6, 8.4)
	Neighbourhood market/stand	17/283 (6.0)	6.1 (2.5, 9.6)
	Friends	7/283 (2.5)	1.1 (0.4, 1.9)
	Sex partner/s	4/283 (1.4)	0.9 (0.0, 1.9)
	Bar / Nightclub	2/283 (0.7)	0.4 (0.0, 0.9)
	NGOs/ outreach service	13/283 (4.6)	4.1 (1.1, 7.1)
Service station(s)	1/283 (0.3)	0.3 (0.0, 0.8)	

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	I do not use condoms	1/283 (0.3)	1.3 (0.0, 3.2)
	Don't know	1/283 (0.3)	0.3 (0.0, 0.8)
Affordability of male condoms	Affordable	174/284 (61.3)	58.3 (50.1, 65.6)
	Somewhat affordable	57/284 (20.1)	24.6 (17.9, 31.4)
	Not affordable	34/284 (12.0)	11.6 (6.9, 16.1)
	Don't know	19/284 (6.7)	5.5 (2.8, 8.1)
	Rather not say	1/285 (0.4)	-
Ever heard of lubricants	Yes	58/291 (19.9)	16.4 (11.3, 21.4)
	No	233/291 (80.1)	83.6 (78.6, 88.7)
	Don't know	13/305 (4.3)	-
	Rather not say	1/305 (0.3)	-
Frequency of lubricant use during vaginal or anal sex	Always	3/58 (5.2)	2.7 (0, 7.0)
	Usually	5/58 (8.6)	4.1 (0, 7.5)
	Sometimes	9/58 (15.5)	21.6 (0, 58.1)
	Rarely	8/58 (13.8)	8.5 (0, 17.8)
	Never	33/58 (56.9)	63.2 (26.7, 100)
Type of lubricant used (multiple response) <sup>1</sup>	Glycerine	8/25 (32.0)	(30.9 (8.9, 52.3))
	Saliva or water	7/25 (28.0)	(25.9 (5.7, 46.9))
	Vaseline	6/25 (24.0)	(27.0 (7.0, 47.4))
	Baby oil	3/25 (12.0)	(7.7 (0, 16.6))
	Lotion	4/25 (16.0)	(11.0 (0.4, 21.6))
	Other oil	1/25 (4.0)	(1.5 (0, 4.0))
	Water-based	4/25 (16.0)	(29.5 (0.1, 59.5))
	Silicone-based	3/25 (12.0)	(6.2 (0.0, 12.5))
	Soap	0/25 (0.0)	-
	Whatever we get from peer educator(s), don't know what it is	0/25 (0.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses

### Sexually Transmitted Infections

Only two in three PWID in Colombo have ever heard of diseases that can be transmitted sexually (66.8%). With regard to recognizing and describing symptoms of an STI, most of them know that burning pain on urination and itching in women (50.4 and 45.4%, respectively) and men (61.2 and 52.1%, respectively) indicate a possible sexually transmitted infection. Very few had a symptom of a sexually transmitted infection (i.e., a discharge or genital ulcer (sore)) or received an STI diagnosis in the year preceding the survey (0.1 and 0.8%, respectively).

**Table 221: Sexually transmitted infections**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of diseases that can be transmitted sexually	Yes	201/287 (70.0)	66.8 (60.2, 73.3)
	No	86/287 (30.0)	33.2 (26.7, 39.8)
	Don't know	17/305 (5.6)	-
	Rather not say	1/305 (0.3)	-
Can describe symptoms of sexually transmitted infections in women (multiple response)	1. Abdominal pain	81/200 (40.5)	38.4 (30.1, 46.7)
	2. Abnormal genital discharge	73/200 (36.5)	37.9 (30.0, 45.9)
	3. Burning pain on urination	103/200 (51.5)	50.4 (42.6, 58.2)
	4. Genital ulcers or sores	65/200 (32.5)	36.2 (27.9, 44.5)
	5. Swelling in groin area	53/200 (26.5)	29.2 (21.5, 37.0)
	6. Itching	91/200 (45.5)	45.4 (37.9, 53.1)
	Don't know any	8/200 (4.0)	5.2 (0.9, 9.5)
Symptoms mentioned (0-6)	Rather not say	1/201 (0.5)	-
	0	8/200 (4.0)	5.2 (1.0, 9.4)
	1	15/200 (7.5)	6.5 (3.2, 9.8)
	2	91/200 (45.5)	43.4 (34.8, 52.0)
	3	79/200 (39.5)	39.4 (31.1, 47.8)
	4	3/200 (1.5)	1.4 (0.2, 2.6)
	5	4/200 (2.0)	4.0 (0.0, 8.2)
Can describe symptoms of sexually transmitted infections in men (multiple response)	6	0/200 (0.0)	-
	1. Genital discharge	100/201 (49.8)	49.5 (41.7, 57.3)
	2. Burning pain on urination	129/201 (64.2)	61.2 (53.4, 69.0)
	3. Genital ulcers or sores	52/201 (25.9)	20.3 (14.5, 26.2)
	4. Swelling in groin area	61/201 (30.3)	30.1 (22.6, 37.5)
	5. Itching	101/201 (50.2)	52.1 (44.4, 59.7)
Symptoms mentioned (0-5)	Don't know any	3/201 (1.5)	2.1 (0.2, 4.1)
	0	3/201 (1.5)	2.1 (0.2, 4.1)
	1	29/201 (14.4)	16.0 (9.3, 22.6)
	2	97/201 (48.3)	49.9 (42.2, 57.7)
	3	68/201 (33.8)	30.5 (23.9, 37.2)
	4	4/201 (2.0)	1.4 (0.1, 2.8)
Tested for sexually transmitted diseases in the past 3 months	5	0/201 (0.0)	-
	Yes	19/293 (6.5)	4.8 (2.6, 7.1)
	No	274/293 (93.5)	95.2 (92.9, 97.4)
	Don't know	11/305 (3.6)	-
Received an STI diagnosis in the past 12 months	Rather not say	1/305 (0.3)	-
	Yes	2/201 (1.0)	0.8 (0.0, 2.0)
	Had a discharge or genital ulcer (sore) in the last 12 months	1/291 (0.3)	0.1 (0.0, 0.3)
	Don't know	13/305 (4.3)	-
Sought treatment	Rather not say	1/305 (0.3)	-
	No	1/1 (100)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Reasons for not seeking treatment (multiple response)	Didn't know where to go for treatment	0/1 (0.0)	-
	Embarrassed or afraid to seek treatment	1/1 (100)	-
	Could not afford treatment	0/1 (0.0)	-
	Unable to get transportation	0/1 (0.0)	-
	Didn't think I needed it	0/1 (0.0)	-

### Use of Prevention Programs

Among PWID in Colombo who had ever tested for HIV, a majority (87.3%) have told their counsellor/health care provider at their last HIV testing that they inject drugs. In addition, almost all (75.3%) of them were satisfied or very satisfied with the quality of services provided at the place where they received their last HIV test.

**Table 222: Contact with healthcare providers**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
<b>HIV testing</b>			
Told the counsellor/health care provider that they inject drugs when last HIV test was received	Yes	44/53 (83.0)	87.3 (79.9, 95.2)
Satisfaction with the quality of services provided at the place where the last HIV test was received	Very satisfied	30/53 (56.6)	63.4 (35.3, 92.6)
	Satisfied	8/53 (15.1)	11.9 (1.4, 21.8)
	A little satisfied	14/53 (26.4)	23.9 (0.0, 48.3)
	Not satisfied	0/53 (0.0)	-
	Don't know	1/53 (1.9)	0.9 (0.3, 2.9)

In the year preceding the survey, one in four (24.4%) PWID in Colombo had sought medical care, with very few (5.92%) of them experiencing any difficulty getting medical care when they sought it.

**Table 223: Use of healthcare services in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sought medical care for any reason	Yes	66/301 (21.9)	24.4 (18.4, 30.5)
	Don't know	4/305 (1.3)	-
Had difficulty getting medical care when they sought it	Yes	7/66 (10.6)	5.9 (1.4, 9.8)
Type of difficulty (multiple response) <sup>1</sup>	Too expensive	1/7 (14.3)	-
	Too far away	0/7 (0.0)	-
	Could not take time from work	4/7 (57.1)	-
	Long waiting times	3/7 (42.9)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

One in five (21.7%) PWID in Colombo has been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the three months preceding the survey. Among those who have, most have received general HIV/STI prevention/transmission information (47.5%) and counselling on condom use and safe sex (17.1%). In addition, one in ten (12.8%) PWID in Colombo received new, clean needles or syringes. Coverage by HIV prevention programs, defined as receipt of at least two interventions (i.e., Given condoms and lubricant; Counselling on condom use and safe sex; Received new, clean needles or syringes) in the past three months, is low, at 2.7%.

**Table 224: Coverage of HIV prevention programs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the past 3 months	Yes	72/301 (23.9)	21.7 (16.0, 27.4)
	Don't know	4/305 (1.3)	-
Services received	General HIV/STI prevention/ transmission information	36/72 (50.0)	47.4 (34.2, 60.6)
	Condoms and lubricants	11/72 (15.3)	15.4 (3.3, 27.3)
	Referral for STI treatment	2/72 (2.8)	2.7 (0.0, 5.9)
	Referral for VCT	3/72 (4.2)	4.5 (0.0, 9.4)
	Counselling on condom use and safe sex	11/72 (15.3)	17.1 (4.7, 29.4)
	Received new, clean needles or syringes	9/72 (12.5)	12.8 (4.7, 21.1)
	Other – counselling	20/72 (27.8)	31.1 (17.8, 44.2)
Other – treatment	10/72 (13.9)	15.2 (6.7, 23.8)	
3.7C Coverage of HIV prevention programs <sup>1</sup>		7/305 (2.3)	2.7 (0, 5.4)

<sup>1</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Received new, clean needles or syringes)

### Experiences of Discrimination and Violence on the basis of being a PWID

As many as half of PWID in Colombo (47.3%) have been verbally insulted on the basis of being a PWID. Many have also been physically assaulted (9.9%) or denied health care and police assistance (7.7 and 8.8%, respectively).

**Table 225: Experiences of discrimination and violence**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Refused health care	Yes	19/291 (6.5)	7.7 (3.1, 12.1)
	Don't know	14/305 (4.6)	-
Refused police assistance	Yes	31/292 (10.6)	8.8 (5.7, 11.8)
	Don't know	13/305 (4.3)	-
Verbally insulted	Yes	140/293 (47.8)	47.3 (40.4, 54.0)
	Don't know	12/305 (3.9)	-
Hit, kicked, or beaten	Yes	34/297 (11.4)	9.9 (6.0, 13.8)
	Don't know	8/305 (2.6)	-
Sexually assaulted or raped	Yes	0/299 (0.0)	-
	Don't know	6/305 (2.0)	-

### Blood Safety

Among PWID in Colombo who had ever donated blood (36.1%), a majority has donated blood more than 12 months ago (85.8%).

**Table 226: Blood safety**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever donated blood	Yes	114/305 (37.4)	36.1 (29.8, 42.4)
Last blood donation	Less than 6 months ago	5/113 (4.4)	3.5 (0.6, 6.3)
	Within 6-12 months	6/113 (5.3)	5.8 (0.0, 13.1)
	More than 12 months ago	97/113 (85.8)	85.8 (76.7, 94.8)
	Don't know	5/113 (4.4)	4.9 (0.1, 9.9)
	Rather not say	1/114 (0.9)	-

### Use of Media

Regarding media use, PWID in Colombo most frequently watch TV (most days or every day: 88.8%) or listen to the radio (most days or every day: 68.5%). Much fewer read the newspaper (most days or every day: 14.8%) or regularly use the Internet (most days or every day: 8.4%). Finally, fewer than half PWID in Colombo have a mobile phone (42.9%).

**Table 227: Use of media in the past 30 days**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Radio	Never	76/305 (24.9)	30.3 (24.0, 36.9)
	Once a month	1/305 (0.3)	0.3 (0, 0.6)
	Once a week	2/305 (0.7)	1.0 (0, 2.4)
	Most days	127/305 (41.6)	40.3 (33.9, 46.5)
	Every day	99/305 (32.5)	28.2 (22.2, 34.0)
TV	Never	26/305 (8.5)	11.1 (6.4, 15.8)
	Once a month	0/305 (0.0)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Once a week	1/305 (0.3)	0.1 (0, 0.3)
	Most days	111/305 (36.4)	37.1 (30.2, 43.8)
	Every day	167/305 (54.8)	51.7 (44.5, 59.0)
Newspaper	Never	219/305 (71.8)	75.7 (70.7, 80.8)
	Once a month	2/305 (0.7)	0.4 (0, 0.8)
	Once a week	32/305 (10.5)	9.2 (5.6, 12.7)
	Most days	41/305 (13.4)	11.2 (7.4, 14.9)
	Every day	11/305 (3.6)	3.6 (1.3, 5.8)
Internet	Never	275/305 (90.2)	91.5 (88.3, 94.8)
	Once a month	0/305 (0.0)	-
	Once a week	0/305 (0.0)	-
	Most days	13/305 (4.3)	3.1 (1.2, 5.0)
	Every day	17/305 (5.6)	5.3 (2.5, 8.1)
Has a mobile phone	Yes	145/305 (47.5)	42.9 (36.6, 49.2)

### Multiplier questions

In May, June or July of 2017, 20.8% of PWID in Colombo received any services (educational leaflets, condoms, HIV counselling) from the NGO Mithuru Mithuro. Even fewer (8.2%) received condoms from the same NGO. In the same time period (May, June or July 2017,) 13.7% of PWID in Colombo were treated for drug use at the rehabilitation centre in Colombo and 5.8% were arrested by police in Colombo. Only 15.6% of PWID in Colombo received a purse by peer educators (staff of the NGO Mithuru Mithuro) during their outreach work in October/November 2017. Few PWID in Colombo participated in the first IBBS in Sri Lanka, implemented in 2014 (4.5%). Finally, four in five PWID in Colombo have ever been in prison for injecting drug use or being in possession of drugs (80.6%).

**Table 228: Multiplier questions**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Received any services (educational leaflets, condoms, HIV counselling) from the NGO Mithuru Mithuro in Colombo in May, June or July 2017	Yes	72/290 (24.8)	20.8 (15.5, 26.2)
	No	218/290 (75.2)	79.2 (73.8, 84.5)
	Don't know	15/305 (4.9)	-
Received condoms from the NGO Mithuru Mithuro in Colombo in May, June or July 2017	Yes	30/292 (10.3)	8.2 (4.3, 12.0)
	No	262/292 (89.7)	91.8 (88.0, 95.6)
	Don't know	13/305 (4.3)	-
Treated for drug use at the rehabilitation centre in Colombo in May, June or July 2017	Yes	45/290 (15.5)	13.7 (9.0, 18.5)
	No	245/290 (84.5)	86.3 (81.5, 90.1)
	Don't know	15/305 (4.9)	-
Arrested by police in Colombo in May, June or July 2017	Yes	26/296 (8.8)	5.8 (3.1, 10.5)
	No	270/296 (91.2)	94.2 (91.9, 96.6)
	Don't know	9/305 (2.9)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Received a purse by peer educators (staff of the NGO Mithuru Mithuro) during 31 October-5 November during their outreach work	Yes	58/297 (19.5)	15.6 (11.3, 19.8)
	No	239/297 (80.5)	84.4 (80.2, 88.7)
	Do not remember	8/305 (2.6)	-
Ever been in prison for injecting drug use or being in possession of drugs?	Yes	249/302 (82.5)	80.6 (75.0, 86.4)
	No	53/302 (17.5)	19.4 (13.6, 25.1)
	Do not remember	3/305 (1.0)	-
Participated in the first IBBS in Sri Lanka in 2014	Yes	15/303 (5.0)	4.5 (1.7, 7.4)
	No	288/303 (95.0)	95.5 (92.6, 98.3)
	Don't know	1/305 (0.3)	-
	Rather not say	1/305 (0.3)	-

### 3. Summary results

#### 3.4 Beach Boys

##### 3.4.1. Colombo

A total of 373 BB respondents were recruited in Galle, including 3 seeds. For estimates, Gile's SS with population size estimate of 1,053 was used (306 low estimate and 1,800 high estimate) along with 0.95 confidence intervals, and 5,000 bootstraps. Across the tables presented below, because estimates based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

#### Homophily and Convergence

As mentioned in the previous sections, a homophily value of one means no homophily, while values above show the presence of positive homophily (e.g. people are recruiting similar to themselves), and values below 1 mean negative homophily (e.g. people are recruiting different from themselves). Amongst BB in Galle, the homophily ranged from 0.80 to 1.54, overall this can be interpreted as weak homophily. Convergence was reached on all key indicators, with the population estimates becoming stable around the 200<sup>th</sup> participant.

**Table 229: Homophily analysis**

	<i>Target indicator</i>	<i>Recruitment homophily</i>	<i>Estimated population homophily</i>
1	HIV prevalence among BB <sup>1</sup> (% HIV positive)	-	-
2	Active syphilis among BB <sup>2</sup>	-	-
3	Viral hepatitis among BB (HBV) <sup>3</sup>	-	-
4	HIV and hepatitis co-infection among BB <sup>3</sup>	-	-
5	Herpes infection among BB	(1.00)	-
6	Knowledge of HIV status among BB <sup>4</sup> (% Know HIV status from an HIV test)	1.09*	1.25
7	Coverage of HIV prevention programs among BB <sup>5</sup> (% Reached with HIV/AIDS prevention programs)	1.05*	1.18
8	Condom use at last high-risk sex <sup>6</sup> (% Used a condom the last time they had sex)	1.03	0.80
9	Discriminatory attitudes towards PLHIV <sup>7</sup> (% who answer 'No' to at least one of the two questions)	1.23*	1.54
10	Avoidance of HIV services because of stigma and discrimination <sup>2,8</sup> (% who answer 'Yes' to at least one of the reasons)	-	-
11	Age (% Mdn+)	0.95	0.94
12	Income (% 20,000 Rs.+)	(1.00)	-

<sup>1</sup> Not calculated because there was one positive case. <sup>2</sup> Not calculated because there were two positive cases. <sup>3</sup> Not calculated because there were not any positive cases. <sup>4</sup> Tested and positive or tested in the past 12 months and negative. <sup>5</sup> Received at least two interventions in the past three months (Given condoms and lubricant;

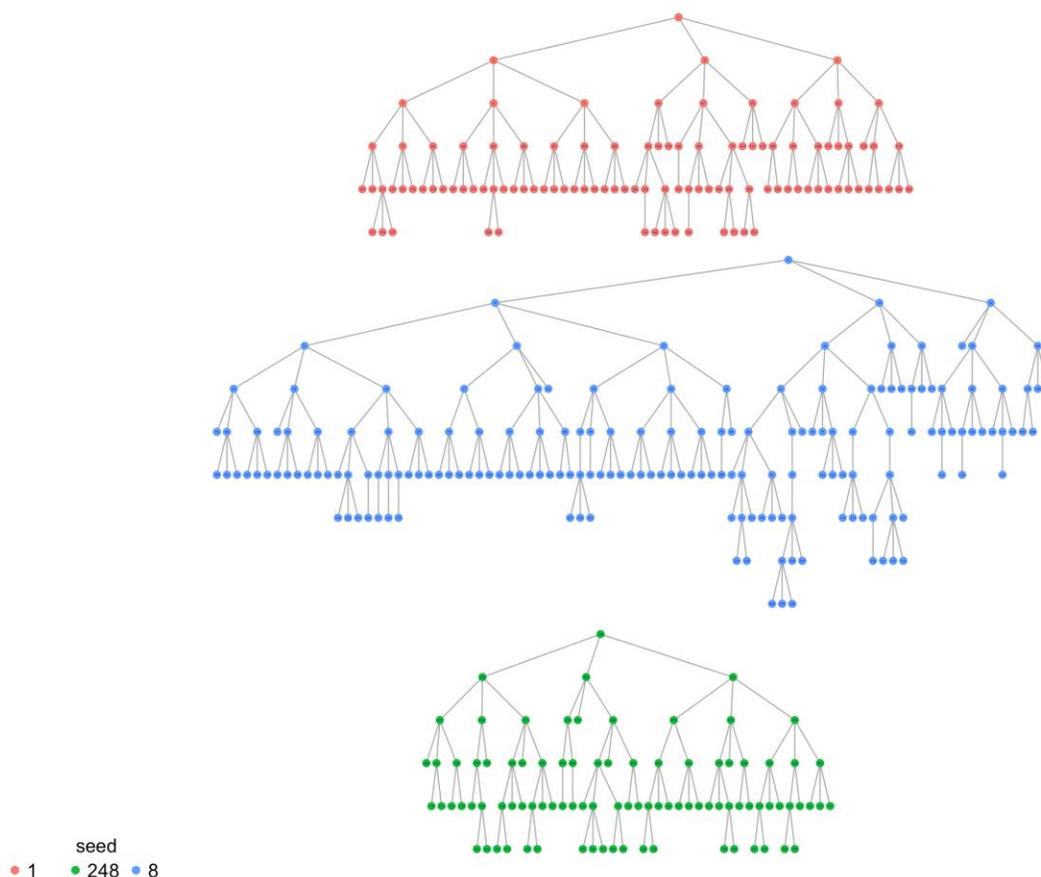
Counselling on condom use and safe sex; Tested for STI).<sup>6</sup> Said they used a condom the last time they had sex with a non-marital, non-cohabiting partner, of those who have had sex with such a partner in the last 12 months.<sup>7</sup> Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?; Do you think that children living with HIV should be able to attend school with children who are HIV negative?<sup>8</sup> Did not seek HIV testing/prevention/treatment services because of: Fear of or concern about stigma by staff or neighbours; Fear of or concern about or experienced violence; Fear of or concern about or experienced police harassment or arrest. This Global AIDS Monitoring indicator has changed. Please see Global AIDS Monitoring 2018, pg. 96.

## Summary Results

### Recruitment

Recruitment started with two initial respondents (seeds), with the third seed included in the study close to the end of fieldwork. Among them, two were almost equally productive, accounting for 28.4% and 24.4% of the total sample. Through the third seed, 47.2% of the total sample was recruited.

**Figure 18. Recruitment tree - BB**



**Table 230: Recruitment information**

Characteristic	Responses	Sample proportion n/N (%)
Main reason for participation	Interest in HIV and sexual health	6/373 (1.6)
	HIV test	246/373 (66.0)
	Interest in issues related to BB	4/373 (1.1)
	Helping the community	-
	Friend wanted me to participate	117/373 (31.4)
	Someone forced me	-
Mode of receiving the coupon	Incentive/Gift	-
	Received the coupon from a friend/acquaintance	368/373 (98.7)
	Found the coupon laying around somewhere	2/373 (0.5)
	Bought or exchanged it for something	-
Acquaintances for:	Seed (from the IBBS office)	3/373 (0.8)
	< 6 months	3/368 (0.8)
	6 months – 1 year	30/368 (8.2)
Screener's confidence that participant is BB	> 1 year	335/368 (91.0)
	Confident	372/373 (99.7)
	Somewhat confident	1/373 (0.3)

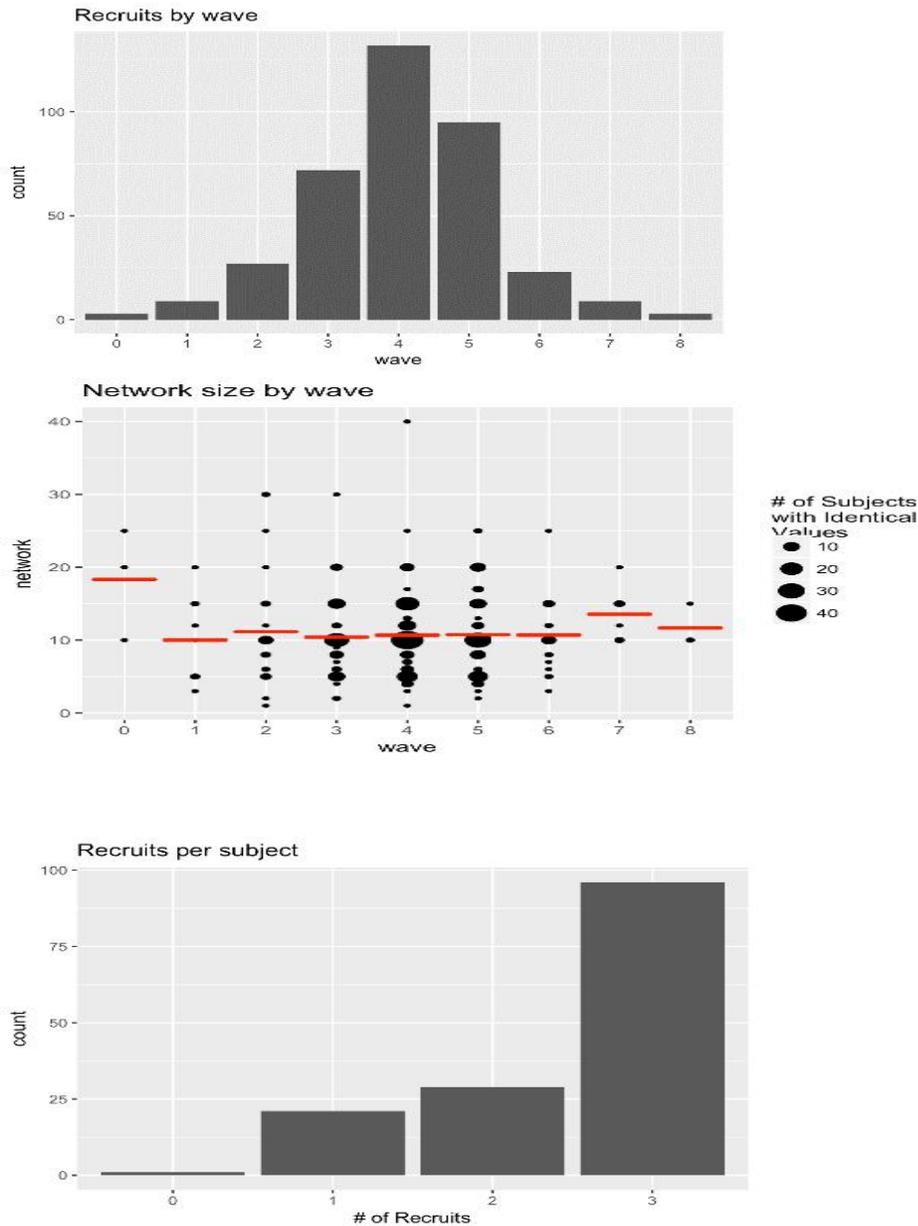
On average, study participants knew about fourteen other BB. When asked how many of the BB they knew who were at least 18 years of age, who lived in Galle, and who they have seen in the past one month, on average, study participants knew eleven other BB.

**Table 231: Network size questions**

Characteristic	Sample statistics
How many men do you know (they know your name and you know theirs), who have in the past 12 months cruised in and around beach areas, and associate with tourists as guides, animators or providers of any form of gratification including vaginal or anal sex?	<i>M (SD)</i> = 13.8 (6.91) Mdn = 13 Range = 2 – 50
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many are above the age of 18?	<i>M (SD)</i> = 12.7 (6.11) Mdn = 12 Range = 2 – 45
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many live, work or study in Galle?	<i>M (SD)</i> = 12.4 (5.93) Mdn = 10 Range = 2 – 40
Of these ___ [number in the previous question] men that you mentioned in the answer to the previous question, how many have you seen in the past 1 month? <sup>1</sup>	<i>M (SD)</i> = 10.8 (5.26) Mdn = 10 Range = 1 – 40

<sup>1</sup> In the estimation of population frequencies and statistics, this question was used as the network size question.

**Figure 19. Recruitment diagnostics - BB**



A total of eight waves were reached among BB in Galle, with the majority of respondents recruited in waves four and five (35.4 and 25.5%, respectively). With the exception of wave 6, in which due to an outlier and a small number of recruits in this wave the average network size is slightly higher than in the previous wave, as is expected, the average network size is the highest in wave zero and lower in subsequent waves, ranging from 18 (Mdn = 20) in wave zero to 10-14 in the subsequent waves. Overall, recruitment in Galle went well, with a majority of study participants recruiting in the study three other BB.

## Biological Indicators

Only one respondent tested positive for HIV, resulting in a 0.4% prevalence for BB in Galle. The prevalence of Syphilis, Herpes and Hepatitis B was 0.6%, 5.0% and 0%. There was no HIV and Hepatitis comorbidity.

**Table 232: Biological test results**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Positive for HIV		1/373 (0.3)	0.2 (0.0, 0.4)
Positive for syphilis (VDRL)	Weakly reactive	1/373 (0.3)	0.2 (0.0, 0.5)
Positive for syphilis (TPPA)		2/373 (0.5)	0.6 (0.0, 1.2)
Positive for syphilis (onsite testing)		2/373 (0.5)	0.6 (0.0, 1.3)
Positive for herpes	Positive Equivocal	16/373 (4.3) 6/373 (1.6)	5.0 (2.5, 7.5) 1.7 (0.6, 2.8)
Positive for hepatitis B surface antigen		0/373 (0.0)	-
HIV and hepatitis co-infection		0/373 (0.0)	-

## Socio-Demographic Characteristics

All BB in Galle were born in Sri Lanka and have Sri Lankan citizenship. District of residence in the past year has been Galle for a majority of respondents (98.5%).

**Table 233: Citizenship and Residence**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Citizenship	Sri Lankan	373/373 (100)	-
Country of birth	Sri Lanka	373/373 (100)	-
District of residence in the past year	Galle Other	373/373 (100) -	-
Primary residence is Galle	Yes	366/373 (98.1)	98.5 (97.7, 99.3)

Mean age of BB in Galle is 33.4 years, with the majority younger than 35 years of age (58.4%). With regard to ethnicity and language spoken at home, almost all (99.5 and 99.8%, respectively) BB in Galle are Sinhalese. Almost all BB in Galle can read and write (96.8%) and have attended at least some formal education (97.5%). Close to two thirds of BB in Galle are in paid work or work occasionally (93.3%), and most (90.1%) earn more than 20,000 Sri Lankan Rupees per month (127 USD).

**Table 234: Core socio-demographic indicators**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age	Sample <i>M (SD)</i> = 33.6 (12.70) Mdn = 30.0	Pop. est. <i>M (SD)</i> = 33.4 (12.73) Mdn = 30.0	-	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	N = 373 Range = 18 - 72	- -	
Age groups	18 - 24 25 - 34 35 - 44 ≥ 45	113/373 (30.3) 106/373 (28.4) 79/373 (21.2) 75/373 (20.1)	30.6 (26.0, 35.3) 27.8 (22.8, 32.8) 21.6 (17.3, 25.7) 20.0 (15.8, 24.2)
Sex	Man	373/373 (100)	-
Sex same as at birth	Yes	373/373 (100)	-
Ethnicity	Sinhalese Sri Lankan Tamil Indian Tamil Moor/Muslim Burgher Malay Other	372/373 (99.7) 1/373 (0.3) 0/373 (0.0) 0/373 (0.0) 0/373 (0.0) 0/373 (0.0) 0/373 (0.0)	99.8 (99.5, 100) 0.2 (0.0, 0.5) - - - - -
Languages spoken at home (multiple response)	Sinhalese Tamil English Other	371/373 (99.5) 1/373 (0.3) 0/373 (0.0) 1/373 (0.3)	99.5 (99.1, 99.9) 0.2 (0.0, 0.5) - 0.2 (0.0, 0.5)
Can read and write	Yes	360/373 (96.5)	96.8 (95.3, 98.3)
Completed level of education	Never attended school Grade 1-5 Grade 6-10 Passed O/L Passed A/L Completed Diploma Completed Degree	10/373 (2.7) 14/373 (3.8) 164/373 (44.0) 162/373 (43.4) 23/373 (6.2) 0/373 (0.0) 0/373 (0.0)	2.5 (1.2, 3.8) 3.2 (1.7, 4.7) 46.4 (41.3, 51.6) 40.4 (35.5, 45.2) 74.6 (36.8, 11.2) - -
Main activity	In paid work (including parental or other leave) Occasional work <sup>1</sup> In unpaid or voluntary work Unemployed Student Retired Rather not say	213/372 (57.3) 132/372 (35.5) 2/372 (0.5) 24/372 (6.5) 0/373 (0.0) 1/372 (0.3) 1/373 (0.3)	61.8 (56.6, 67.0) 31.5 (26.6, 36.3) 0.4 (0.0, 0.9) 6.2 (4.2, 8.2) 0.2 (0.0, 0.4) - -
Income	< 5,000 Rupees 5,000-10,000 10,001-20,000 20,001-30,000 30,001-40,000 > 40,000 Rupees Don't know Rather not say	0/371 (0.0) 3/371 (0.8) 21/371 (5.7) 158/371 (42.6) 135/371 (36.4) 51/371 (13.7) 3/371 (0.8) 2/373 (0.5)	- 1.2 (0.0, 2.5) 8.7 (3.7, 13.9) 44.9 (39.9, 49.9) 33.0 (28.5, 37.4) 12.2 (9.3, 15.0) - -

<sup>1</sup> Eleven respondents mentioned several different activities that they perform (e.g., diving, tourist guide); their answers were recoded to 'occasional work.'

Almost all BB in Galle live in their own home (50.7%) or in their parent's home (46.3%). On average, BB in Galle live with three other people, and about half (49.5%) share their household with at least one child. About half of BB in Galle are in a relationship (54.8%). For almost all, their partner is a woman (98.4%).

**Table 235: Household information and family life**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Type of residence	Temporary shelter		3/373 (0.8)	0.8 (0.1, 1.5)
	Boarding house		6/373 (1.6)	1.9 (0.5, 3.3)
	Parents' home		162/373 (43.4)	46.3 (41.2, 51.6)
	My own home		201/373 (53.9)	50.7 (45.6, 55.7)
	Lodging		1/373 (0.3)	0.2 (0.0, 0.5)
	On the street		0/373 (0.0)	-
	Brothel		0/373 (0.0)	-
	Other		0/373 (0.0)	-
Number of household members	Sample	Pop. est.	-	-
	<i>M (SD) =</i> 4.0 (1.31) <i>Mdn =</i> 4.0 <i>N =</i> 372 <i>Range =</i> 1 – 10	<i>M (SD) =</i> 3.9 (1.28) <i>Mdn =</i> 4.0 - -		
Number of children currently living in the household	No children		178/368 (48.4)	50.5 (45.4, 55.6)
	One		114/368 (31.0)	29.7 (24.8, 34.6)
	Two		68/368 (18.5)	17.5 (13.9, 21.0)
	Three or more		8/368 (2.2)	2.3 (0.9, 3.7)
	Rather not say		5/373 (1.3)	-
Number of children	No children		213/368 (57.9)	59.6 (54.8, 64.3)
	One		65/368 (17.7)	16.4 (13.1, 19.7)
	Two		64/368 (17.4)	16.6 (12.8, 20.3)
	Three or more		26/368 (7.1)	7.5 (5.1, 9.9)
	Rather not say		5/373 (1.3)	-
Marital status	Single (Never married)		175/373 (46.9)	49.6 (44.4, 54.8)
	Married		176/373 (47.2)	45.7 (40.8, 50.6)
	Divorced/Separated		13/373 (3.5)	27.9 (16.8, 39.1)
	Widowed		9/373 (2.4)	1.9 (0.9, 2.9)
Cohabitation	Living together with a partner/spouse		162/373 (43.4)	42.6 (37.9, 47.4)
	Involved in a relationship without living together		47/373 (12.6)	12.2 (8.3, 16.1)
	Have no relationship/Do not have a partner		164/373 (44.0)	45.1 (40.1, 50.2)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sex of partner	Woman	204/209 (97.6)	98.4 (97.5, 99.5)
	Man	5/209 (2.4)	1.6 (0.5, 2.5)

## HIV/AIDS

About a third of BB in Galle have never heard of HIV/AIDS (30.5%). Among those who have, most have received the most thorough information about HIV/AIDS from health services (40.3%) or from school (34.3%). Among BB in Galle who have heard of HIV/AIDS, a majority (85.6%) have never discussed HIV/AIDS with any of their partners.

**Table 236: General knowledge about HIV/AIDS**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has heard of HIV/AIDS	Yes	249/363 (68.6)	69.5 (65.0, 73.9)
	No	114/363 (31.4)	30.5 (26.1, 35.0)
	Don't know	10/373 (2.7)	-
Main source of the most thorough understanding of HIV/AIDS	School	69/249 (27.7)	34.3 (27.3, 42.6)
	Health services	101/249 (40.6)	40.3 (32.6, 47.7)
	Workplace	2/249 (0.8)	0.5 (0.1, 0.9)
	Friends/Family	6/249 (2.4)	1.6 (0.5, 2.6)
	Television	15/249 (6.0)	4.5 (1.9, 6.7)
	Newspaper/Magazines	10/249 (4.0)	3.7 (1.0, 6.2)
	Posters/Billboards	10/249 (4.0)	3.2 (1.4, 4.9)
	Pamphlets/Leaflets	15/249 (6.0)	4.6 (2.2, 6.7)
	Radio	0/249 (0.0)	-
	NGOs	18/249 (7.2)	6.0 (3.3, 8.5)
Discussed HIV with any sexual partner	Yes, all	2/249 (0.8)	0.4 (0, 7.4)
	Yes, some	13/249 (5.2)	4.7 (3.0, 7.1)
	No, none	215/249 (86.3)	85.6 (81.3, 89.6)
	Don't know	19/249 (7.6)	9.2 (5.7, 13.1)
Partner ever disclosed their HIV status <sup>1</sup>	Yes, all	2/15 (13.3)	-
	Yes, some	13/15 (86.7)	-
	No, none	0/15 (0.0)	-
Knows somebody who is HIV-positive or has died of AIDS	Yes	14/249 (5.6)	4.9 (2.5, 7.1)
Close friend or relative died of AIDS	Yes, close relative	0/249 (0.0)	-
	Yes, close friend	1/249 (0.4)	0.2 (0.0, 0.6)
	Yes, close relative and close friend	0/249 (0.0)	-
	No	176/249 (70.7)	69.5 (62.1, 76.7)
	Don't know	72/249 (28.9)	30.3 (23.0, 37.7)

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

BB in Galle either cannot gauge their personal risk of HIV (31.4%) or they perceive it as low or none (61.3%), because they always use condoms (82.2%).

**Table 237: Perception of personal HIV risk**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Personal HIV risk	No risk	205/373 (55.0)	58.3 (53.4, 63.3)
	Low risk	7/373 (1.9)	3.0 (0.8, 5.2)
	Moderate risk	19/373 (5.1)	4.8 (2.9, 6.7)
	High risk	10/373 (2.7)	2.5 (1.2, 3.7)
	Don't know	132/373 (35.4)	31.4 (26.7, 36.1)
Reasons for perceiving the risk as moderate or high (multiple response)	Many sexual partners	6/29 (20.7)	(22.5 (8.1, 37.7))
	Didn't always use condoms	18/29 (62.1)	(59.4 (43.9, 75.9))
	Injected drugs	0/29 (0.0)	-
	Partner has other partners	7/29 (24.1)	(24.1 (10.7, 36.8))
Reasons for perceiving no or low risk (multiple response)	Trust my partner/s	62/212 (29.2)	22.4 (17.4, 27.5)
	Always use condoms	163/212 (76.9)	82.2 (77.7, 86.8)
	Other	1/212 (0.5)	0.3 (0.0, 0.7)
	Don't know	5/212 (2.4)	1.7 (0.0, 3.6)

Knowledge about HIV prevention is somewhat low among BB in Galle, with only a third of them (38.3%) being able to correctly identify modes of sexual transmission of HIV and reject major misconceptions about transmission HIV. When looking at specific items that that the composite indicator consists of, most of BB in Galle know that that the risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners (64.6%). Somewhat fewer also know that a healthy-looking person can have HIV (51.4%).

**Table 238: GAM 5.1 Knowledge about HIV prevention, disaggregated by age**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners	<u>Among all</u> Yes	231/363 (63.6)	64.6 (60.9, 68.4)
	<u>Among those aged 18 - 24</u> Yes	76/113 (67.3)	67.3 (57.4, 77.6)
Person can reduce the risk of getting HIV by using a condom every time he/she has sex	<u>Among all</u> Yes	201/363 (55.4)	58.4 (54.6, 62.2)
	<u>Among those aged 18 - 24</u> Yes	72/113 (63.7)	66.2 (56.6, 76.6)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Healthy-looking person can have HIV	<u>Among all</u> Yes	180/363 (49.6)	51.4 (47.3, 55.7)
	<u>Among those aged 18 – 24</u> Yes	60/113 (53.1)	55.5 (45.6, 66.2)
Person can get HIV from mosquito bites	Among all No	210/363 (57.9)	58.9 (54.9, 62.8)
	<u>Among those aged 18 – 24</u> No	73/113 (64.6)	65.4 (55.4, 75.4)
Person can get HIV by sharing food with someone who is infected	<u>Among all</u> No	206/363 (56.7)	59.0 (55.0, 62.9)
	<u>Among those aged 18 – 24</u> No	69/113 (61.1)	62.5 (52.5, 73.0)
Composite indicator for knowledge about HIV prevention (1-5 <sup>1</sup> )	<u>Among all</u> # of correct answers		
	None	116/363 (32.0)	30.9 (26.4, 35.3)
	One	8/363 (2.2)	2.2 (0.9, 3.6)
	Two	18/363 (5.0)	4.4 (2.6, 6.2)
	Three	29/363 (8.0)	7.0 (4.8, 9.2)
	Four	63/363 (17.4)	17.2 (13.2, 21.1)
	Five	129/363 (35.5)	38.3 (32.6, 44.1)
	<u>Among those aged 18 - 24</u> # of correct answers		
	None	31/113 (27.4)	27.0 (18.9, 35.0)
	One	1/113 (0.9)	0.7 (0.7, 0.7)
	Two	6/113 (5.3)	4.6 (0.0, 9.4)
	Three	8/113 (7.1)	7.2 (0.1, 14.4)
Four	22/113 (19.5)	16.4 (0.0, 40.3)	
Five	45/113 (39.8)	44.0 (21.3, 68.4)	
HIV can be transmitted from mother to her unborn child	Yes	286/373 (76.7)	76.0 (71.7, 80.4)
	No	26/373 (7.0)	7.2 (4.5, 9.8)
	Don't know	61/373 (16.4)	16.8 (13.0, 20.6)
Ever heard of ART	Yes	47/373 (12.6)	13.9 (9.4, 18.4)
	No	303/373 (81.2)	79.5 (74.6, 84.3)
	Don't know	23/373 (6.2)	6.6 (4.3, 8.9)

<sup>1</sup> Don't know is recorded as incorrect. Numerator for individual and the composite indicator excludes those who have never heard of HIV/AIDS, while all who had a valid answer to the question regarding whether they had ever heard of HIV/AIDS are included in the denominator.

Among BB in Galle who have ever heard of HIV/AIDS, more than half (60.5%) exhibit a discriminatory attitude towards PLHIV, with somewhat more saying that they would not buy fresh vegetables from a shopkeeper or vendor if she knew that this person had HIV (69.2%) than saying that they think children living with HIV should not be able to attend school with children who are HIV negative (50.6%).

**Table 239: GAM 4.1 Discriminatory attitudes towards PLHIV, disaggregated by age**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Thinks that children living with HIV should be able to attend school with children who are HIV negative	<u>Among all</u>		
	Yes	121/215 (56.3)	50.6 (41.8, 59.2)
	No	94/215 (43.7)	49.4 (40.8, 58.2)
	Don't Know/Not sure/It depends	34/249 (13.7)	-
	<u>Among those aged 18-49</u>		
	Yes	112/194 (57.7)	50.7 (41.0, 60.1)
	No	82/194 (42.3)	49.3 (39.9, 59.0)
	Don't know/Not sure/It depends	28/222 (12.6)	-
	<u>Among those aged 25-49 years</u>		
Yes	66/122 (54.1)	43.5 (32.2, 54.3)	
No	56/122 (45.9)	56.5 (45.7, 67.8)	
Don't know/Not sure/It depends	17/139 (12.2)	-	
Would buy fresh vegetables from a shopkeeper or vendor if he/she knew that this person had HIV?	<u>Among all</u>		
	Yes	64/180 (35.6)	30.8 (21.6, 39.3)
	No	116/180 (64.4)	69.2 (60.7, 78.4)
	Don't Know/Not sure/It depends	66/249 (26.5)	-
	Rather not say	3/249 (1.2)	-
	<u>Among those aged 18-49</u>		
	Yes	61/160 (38.1)	32.7 (22.6, 42.5)
	No	99/160 (61.9)	67.3 (57.5, 77.4)
	Don't know/Not sure/It depends	59/222 (26.6)	-
	Rather not say	3/222 (1.4)	-
	<u>Among those aged 25-49 years</u>		
	Yes	36/100 (36.0)	25.8 (15.9, 34.0)
No	64/100 (64.0)	74.2 (66.0, 84.1)	
Don't know/Not sure/It depends	37/139 (26.6)	-	
Rather not say	2/139 (1.4)	-	
Composite indicator for discriminatory attitudes towards PLHIV (1-2 <sup>1</sup> )	Responded 'No' to either of the two questions		
	<u>Among all</u>	127/231 (55.0)	60.5 (52.7, 68.5)
	<u>Among those aged 18-49</u>	109/206 (52.9)	59.1 (50.7, 67.9)
	<u>Among those aged 25-49</u>	73/130 (56.2)	66.3 (57.1, 75.7)

<sup>1</sup> Participants who responded don't know/not sure/it depends and those who refused to answer were excluded from the analysis. Numerator: Number of respondents who respond no to either of the two questions; Denominator: Number of all respondents who have heard of HIV.

Two-thirds (65.5%) of BB in Galle know where to receive an HIV test, with a majority (95.1%) mentioning government STI clinic as a place that they know offers an HIV test. Only one in three (35.3%) BB in Galle has ever tested for HIV, and only slightly fewer (30.0%) have received an HIV test within 12 months before the survey was carried out. Among those who ever did receive an HIV test, most (94.0%) have received their last HIV test at a government STI clinic.

**Table 240: HIV testing**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Knows where to receive an HIV test	Yes	250/372 (67.2)	65.5 (60.6, 70.5)
	No	122/372 (32.8)	34.5 (29.5, 39.4)
	Rather not say	1/373 (0.3)	0.2 (0.0, 0.5)
Places that offer HIV testing (multiple response)	Government clinic – STI	236/250 (94.4)	95.1 (92.9, 97.4)
	Govt. clinic – non-STI	25/250 (10.0)	8.7 (5.4, 11.9)
	Private clinic	17/250 (6.8)	5.7 (3.5, 7.9)
	Private pharmacy or chemist	0/250 (0.0)	-
	Traditional healer/herbalist	0/250 (0.0)	-
	Other (mobile service)	4/250 (1.6)	1.3 (0.3, 2.3)
	Don't know any	5/250 (2.0)	2.0 (0.7, 3.3)
Knows HIV status from an HIV test	No, I have never been tested	219/336 (65.2)	64.7 (58.7, 70.6)
	Yes, I have been tested	117/336 (34.8)	35.3 (29.3, 41.3)
	Rather not say	37/373 (9.9)	15.8 (11.1, 20.4)
Last HIV test	< 6 months	76/117 (65.0)	69.1 (61.2, 77.3)
	6 – 12 months	25/117 (21.4)	19.2 (12.3, 25.8)
	> 12 Months	16/117 (13.7)	11.7 (6.5, 16.8)
Result of last HIV test	Negative	109/117 (93.2)	94.5 (91.7, 97.3)
	Positive	0/117 (0.0)	-
	Indeterminate	0/117 (0.0)	-
	Didn't receive the result	7/117 (6.0)	4.7 (2.0, 7.3)
	Don't know	1/117 (0.9)	0.8 (0.0, 1.6)
Composite indicator for knowledge of HIV status <sup>1</sup> (1-3)	Yes	96/336 (28.6)	30.0 (24.2, 35.9)
Last HIV test was voluntary	Yes	116/117 (99.1)	99.4 (98.6, 100)
Place where last HIV test was received	Government clinic – STI	109/117 (93.2)	94.0 (90.9, 97.2)
	Government clinic – non-STI	0/117 (0.0)	-
	Private clinic	2/117 (1.7)	1.8 (0.0, 3.9)
	Private pharmacy or chemist	0/117 (0.0)	-
	Traditional healer/herbalist	0/117 (0.0)	-
	Other	6/117 (5.1)	4.2 (1.9, 6.5)

<sup>1</sup> Numerator: Number of respondents who tested HIV-positive or who tested in the past 12 months and the result was negative; Denominator: Number of respondents who provided a valid answer to the question about their knowledge about their HIV status from an HIV test.

Among BB in Galle who have never received an HIV test, a majority said it was because they did not have time (45.0%) or because they do not think they at risk of HIV (3.9%). Hardly any (0.9%) BB in Galle avoid HIV services because of stigma and discrimination.

**Table 241: Reasons for never receiving an HIV test**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Reasons for never receiving an HIV test (multiple response)	Don't know where to go	37/216 (17.1)	16.2 (11.7, 21.0)
	I always use condoms	3/216 (1.4)	1.4 (0.0, 2.8)
	Not at risk of getting HIV	66/216 (30.6)	32.9 (25.5, 40.2)
	Didn't have time/Too busy	98/216 (45.5)	45.0 (37.9, 51.9)
	I trust my partner	5/216 (2.3)	1.9 (0.6, 3.2)
	Afraid of knowing I may be HIV-positive	0/216 (0.0)	-
	Lack of confidentiality	25/216 (11.6)	11.0 (7.0, 14.9)
	Inconvenient testing location	36/216 (16.7)	16.0 (11.7, 20.3)
	No money	0/216 (0.0)	-
	Other	5/216 (2.3)	2.3 (0.5, 4.2)
	Don't know	18/216 (8.3)	7.7 (4.2, 11.4)
	Rather not say	3/219 (1.4)	-
Never receiving an HIV test because of stigma and discrimination (multiple response)	Fear or concern about stigma by staff or neighbours	0/218 (0.0)	- 0.5 (0.0, 1.1)
	Fear of or concern about or experienced violence	1/218 (0.5)	0.4 (0.0, 1.0) -
	Fear of or concern about or experienced police harassment or arrest	1/218 (0.5)	-
	Rather not say	1/219 (0.5)	-
4.2 Composite indicator for avoidance of HIV services because of stigma and discrimination (1-3)		2/218 (0.9)	0.9 (0.0, 1.9)

### Sexual Behaviour

Almost all BB in Galle have ever had sex with a woman (96.5%) and fewer than one in five (16.0%) have ever had sex with a man. At first anal sex with a man, BB in Galle were on average 17 years of age. Their first male partner was on average much older, at 27 years of age.

**Table 242: General sexual history**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had sex with a woman (vaginal or anal intercourse)	Yes	366/373 (98.1)	96.5 (92.8, 100)
Ever had anal sex with a man	Yes	67/367 (18.3)	16.0 (13.0, 19.0)
	No	300/367 (81.7)	84.0 (81.0, 87.0)
	Rather not say	6/373 (1.6)	1.0 (0.4, 1.5)

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age at first anal sex with a man	Sample $M (SD) =$ 16.5 (2.10) Mdn = 16.0 $N = 67$ Range = 14 - 23	Pop. est. $M (SD) =$ 16.7 (2.11) Mdn = 16.0 - -	-	-
	< 18		43/67 (64.2)	61.2 (51.1, 69.8)
Age of partner at first anal sex with a man	Sample $M (SD) =$ 26.3 (9.56) Mdn = 25.0 $N = 54$ Range = 16 - 57	Pop. est. $M (SD) =$ 26.5 (9.60) Mdn = 25.0 - -	-	-

In the seven days before the survey, BB in Galle on average had two sexual partners, although as many as one in four (23.7%) did not have any sexual partners in the week preceding the survey.

**Table 243: Sexual partners in the past 7 days**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of all sexual partners	Sample $M (SD) =$ 1.8 (1.75) Mdn = 2.0 $N = 373$ Range = 0 - 20	Pop. est. $M (SD) =$ 1.7 (1.57) Mdn = 2.0 - -	-	-
	0		88/373 (23.6)	23.7 (19.3, 28.1)
	1		85/373 (22.8)	24.3 (19.6, 28.9)
	2 or more		200/373 (53.6)	52.0 (47.0, 57.1)
Number of casual <sup>1</sup> sexual partners (among those who had at least one sexual partner)	Sample $M (SD) =$ 1.6 (1.30) Mdn = 2.0 $N = 285$ Range = 0 - 10	Pop. est. $M (SD) =$ 1.5 (1.16) Mdn = 2.0 - -	-	-
	0		65/285 (22.8)	19.0 (14.8, 22.6)
	1		74/285 (26.0)	30.2 (24.0, 36.8)
	2 or more		146/285 (51.2)	50.9 (44.3, 57.5)
Number of regular <sup>2</sup> sexual partners (among those who had at least one sexual partner)	Sample $M (SD) =$ 0.8 (0.97) Mdn = 1.0 $N = 285$	Pop. est. $M (SD) =$ 0.7 (0.90) Mdn = 1.0 -	-	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Range = 0 – 10	-	
	0	122/285 (42.8)	49.4 (43.4, 56.2)
	1	110/285 (36.8)	34.3 (28.7, 39.4)
	2 or more	53/285 (18.6)	16.3 (12.3, 20.0)

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis

In the twelve months preceding the survey, BB in Galle on average had eight sexual partners, with two-thirds of them had five or more sexual partners (65.0%). With regard to type of relationship, BB in Galle on average had seven casual and one regular sexual partners.

**Table 244: Sexual partners in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Number of all sexual partners	Sample <i>M (SD)</i> = 8.1 (7.02) Mdn = 6.0 <i>N</i> = 373 Range = 1 – 50	Pop. est. <i>M (SD)</i> = 8.1 (7.08) Mdn = 6.0 - -	-
	1 – 2	63/373 (16.9)	16.8 (13.4, 20.3)
	3 – 4	63/373 (16.9)	18.1 (13.8, 22.5)
	5 or more	247/373 (66.2)	65.0 (60.1, 70.0)
Number of casual <sup>1</sup> sexual partners	Sample <i>M (SD)</i> = 7.0 (6.59) Mdn = 5.0 <i>N</i> = 373 Range = 0 – 49	Pop. est. <i>M (SD)</i> = 7.0 (6.65) Mdn = 5.0 - -	-
	0	17/373 (4.6)	4.6 (2.3, 7.0)
	1	24/373 (6.4)	6.7 (4.2, 9.2)
	2	48/373 (12.9)	12.8 (9.8, 15.8)
	3 or more	284/373 (76.1)	75.9 (71.9, 79.8)
Number of regular <sup>2</sup> sexual partners	Sample <i>M (SD)</i> = 1.2 (2.05) Mdn = 1.0 <i>N</i> = 373 Range = 0 – 25	Pop. est. <i>M (SD)</i> = 1.1 (2.10) Mdn = 1.0 - -	-
	0	160/373 (42.9)	47.6 (42.4, 53.0)
	1	93/373 (24.9)	22.1 (18.2, 26.0)
	2	93/373 (24.9)	22.4 (18.5, 26.1)
	3 or more	27/373 (7.2)	7.8 (5.2, 10.6)

<sup>1</sup>Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis

Most BB in Galle interact with tourists through working as tour guides (62.9%) or drivers (13.3%).

**Table 245: Interactions with tourists**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Types of interactions with tourists (multiple response) <sup>1</sup>	Tour guide	208/373 (55.8)	62.9 (56.8, 69.1)
	Driver	62/373 (16.6)	13.3 (10.3, 16.5)

<sup>1</sup>Two additional response categories were included in the questionnaire, including 'I have sex with them, no money is exchanged for sex' and 'They pay me for sex'. However, the answers were not read out, therefore sex most likely was not the first thing to come to mind to BBs – as responses were only n=5 and n=7, respectively, this data has been removed from the table to avoid misinterpretation.

Almost all BB in Galle have ever had sex with a tourist (98.6%), and a majority have had sex with a tourist in the 12 months preceding the survey (85.5%). Most BB in Galle have sex with women (98.3%), although about one in ten BB in Galle has had sex with a male tourist (10.5%).

**Table 246: Sexual behaviour with tourists**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had sex with a tourist	Yes	368/373 (98.7)	98.6 (97.4, 99.8)
Had sex with a tourist in the past 12 months	Yes	306/368 (83.1)	85.5 (82.0, 88.9)
Partners' sex	Only women	327/368 (88.9)	89.5 (86.8, 92.2)
	Only men	6/368 (1.6)	1.7 (0.5, 2.9)
	Both men and women	35/368 (9.5)	8.8 (0.6, 11.2)

At last sex with a tourist, three in four BB in Galle used a condom (75.3%). Among those who did not use a condom, most did not use a condom because one was not available (51.9%), because they did not think it was necessary (48.1%) or because they did not think of using a condom (38.8%). At last sex with a tourist about one in four (24.4%) BB was paid for sex and for a majority (92.3%), their partner was a woman. Finally, tourists BB have sex with most often come to Sri Lanka from Germany and Russia.

**Table 247: Sexual behaviour at last sex with a tourist**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Used a condom at last sex with a tourist	Yes	259/362 (71.5)	75.3 (71.3, 79.4)
	No	103/362 (28.5)	24.7 (20.7, 28.7)
	Don't remember	6/368 (1.6)	-
Reasons for not using a condom (multiple response)	Never heard of condoms	3/103 (2.9)	2.6 (0.4, 4.8)
	Don't know how to obtain a condom	5/103 (4.8)	4.6 (1.4, 7.9)
	I didn't think it was necessary	51/103 (49.5)	48.1 (40.1, 56.1)
	I didn't think of it	40/103 (38.8)	38.8 (30.5, 47.1)
	Not available	53/103 (51.4)	51.9 (43.3, 60.6)
	Too expensive	0/103 (0.0)	-
	Partner objected	4/103 (3.9)	4.6 (0.8, 8.4)
	Don't like them	1/103 (1.0)	1.1 (0, 2.9)
	Used another contraceptive	0/103 (0.0)	-
	Partner was faithful	1/103 (1.0)	0.9 (0.0, 2.2)
	Condoms take away pleasure	3/103 (2.9)	2.7 (0.3, 5.1)
Other	1/103 (1.0)	0.9 (0.0, 2.2)	
Was paid for sex at last sex with a tourist	Yes	93/366 (25.4)	24.4 (20.2, 28.5)
	No	273/366 (74.6)	75.6 (71.5, 79.8)
	Don't know	2/368 (0.5)	-
Partner's sex	Woman	339/368 (92.1)	92.3 (89.9, 94.7)
	Man	29/368 (7.9)	7.7 (5.3, 10.1)
Most common nationality of sexual partners (up to three responses) <sup>1</sup>	Germany	148/368 (40.2)	39.1 (34.0, 44.2)
	Russia	137/368 (37.2)	34.1 (29.6, 38.6)
	France	68/368 (18.5)	16.7 (13.2, 20.1)
	Thailand	50/368 (13.6)	12.0 (8.9, 15.1)
	England	34/368 (9.2)	7.4 (5.4, 9.4)
	Never had sex with a tourist	5/373 (1.3)	-
Typically meets tourists (multiple response):	On the beach	224/368 (60.9)	67.4 (61.9, 72.7)
	Bars / clubs / restaurants	139/368 (37.8)	31.0 (26.9, 35.3)
	Through work	104/368 (28.3)	24.3 (20.2, 28.4)
	Other (at parties)	4/368 (1.1)	1.6 (0.0, 3.3)

<sup>1</sup> Among 18 countries that were mentioned.

About one-third (39.7%) of BB in Galle had ever received money, goods or services in exchange for sex. Among them, most (96.7%) have received money, goods or services in exchange for sex in the past 12 months. Among them, a majority (92.0%) received money, goods or services in exchange for sex with a tourist. In fact, for a majority of BB in Galle, their last partner was a tourist (85.5%) and a woman (82.0%). At last sex for which they were paid, three in four BB in Galle (77.0%) used a condom.

About one-third of BB in Galle have ever given money, goods or services in exchange for sex (32.3%) and among them, 96.7% had given money, goods or services in exchange for sex in the past 12 months, with their last partner, in most cases (99.5%) being a man. At last sex they paid for, 70.7% of BB in Galle used a condom.

**Table 248: Transactional sex**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Ever received money, goods or services in exchange for sex	Yes		158/372 (42.5)	39.7 (35.0, 44.5)
	No		214/372 (57.5)	60.3 (55.5, 65.1)
	Don't know		1/373 (0.3)	-
Received money, goods or services in exchange for sex in the past 12 months			149/158 (94.3)	94.7 (91.7, 97.8)
Received money, goods or services in exchange for <u>sex with a tourist</u> in the past 12 months			139/149 (93.3)	92.0 (87.2, 96.8)
Amount of money typically received in exchange for sex (in Sri Lankan rupees)	Sample <i>M (SD)</i> = 7,816 (10,292) Mdn = 4,000 N = 95 Range = 1,000 – 50,000	Pop. est. <i>M (SD)</i> = 7,758 (9.770)  Mdn = 4,000 - -	-	-
	1,000 – 2,000 3,000 – 5,000 5,000+		23/95 (24.2) 44/95 (46.3) 28/95 (29.5)	23.3 (11.1, 34.9) 47.3 (37.0, 58.3) 29.5 (20.0, 38.7)
Amount of money typically received in exchange for sex (in USD <sup>1</sup> )	Sample <i>M (SD)</i> = 50.5 (66.5) Mdn = 25.8 N = 95 Range = 6.5 - 323	Pop. est. <i>M (SD)</i> = 50.0 (63.0) Mdn = 25.8 - -	-	-
	6.5 – 13 19 – 32 39+		23/95 (24.2) 44/95 (46.3) 28/95 (29.5)	23.3 (11.1, 34.9) 47.3 (37.0, 58.3) 29.5 (20.0, 38.7)
Receives something other than money for sex (e.g., gifts or a meal)?	Yes		127/156 (81.4)	79.8 (73.5, 86.4)
	No		29/156 (18.6)	20.2 (13.6, 26.5)
	Rather not say		2/158 (1.3)	-
Type of gift (multiple response) <sup>2</sup>	Food and/or drinks		38/127 (29.9)	31.2 (22.9, 39.5)
	Tickets to parties		35/127 (27.6)	27.4 (19.9, 34.9)
	Electronics		27/127 (21.3)	20.7 (14.5, 27.0)
	Jewellery		5/127 (3.9)	3.9 (0.6, 7.2)
	Different gifts		35/127 (27.6)	26.7 (9.5, 33.8)
Sex of partner at last sex for which money was received	Woman		129/158 (81.6)	82.0 (77.0, 87.1)
	Man		29/158 (18.4)	18.0 (12.9, 23.0)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Last paying partner was tourist	Yes	137/158 (86.7)	85.5 (79.8, 20.2)
Used a condom at last sex for which money was received	Yes	120/156 (76.9)	77.0 (70.1, 83.9)
	No	36/156 (23.1)	23.0 (16.1, 29.9)
	Don't know	2/158 (1.3)	-
Ever given money, goods or services in exchange for sex		143/373 (38.3)	32.3 (28.0, 36.6)
Gave money, goods or services in exchange for sex with in the past 12 months		139/143 (97.2)	96.7 (93.8, 99.5)
Sex of partner at last sex for which money was given	Woman	142/143 (99.3)	99.5 (99.4, 99.6)
	Man	1/143 (0.7)	0.5 (0.4, 0.6)
Used a condom at last sex for which money, goods or services were given	Yes	101/142 (71.1)	70.7 (60.3, 80.7)
	No	41/142 (28.9)	29.4 (19.3, 39.7)
	Don't know	1/143 (0.7)	-

<sup>1</sup> Central Bank of Sri Lanka currency exchange rate on 28 February 2018 (1 USD = 154.74 Sri Lankan Rs.), available at [http://www.cbsl.gov.lk/htm/english/cei/er/e\\_1.asp](http://www.cbsl.gov.lk/htm/english/cei/er/e_1.asp); <sup>2</sup> Answers recoded to five categories

Almost all (98.0%) BB in Galle have ever had a casual sexual partner and among them, 95.4% have had a casual sexual partner in the 12 months before the survey. Among them, only half (53.9%) have used a condom consistently in the past 12 months, although as many as three in four (77.6%) did use a condom at last sex with a casual partner. More than two in three (70.6%) BB in Galle did not know or ask their last casual sexual partner about her/his HIV status.

**Table 249: Casual Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sex of casual partners <sup>1</sup>	Only women	331/373 (88.7)	89.3 (86.3, 92.3)
	Only men	11/373 (2.9)	2.7 (1.1, 4.3)
	Both men and women	24/373 (6.4)	5.9 (4.0, 7.9)
	Never had a casual sexual partner	7/373 (1.9)	2.0 (0.3, 3.8)
Had a casual partner in the past 12 months	Yes	356/373 (4.6)	95.4 (93.0, 97.6)
Frequency of condom use in the past 12 months <sup>2</sup>	Every time	178/354 (50.3)	53.9 (48.2, 59.6)
	Almost every time	100/354 (28.2)	26.6 (21.9, 31.1)
	Sometimes	22/354 (6.2)	6.0 (3.7, 8.3)
	Never	54/354 (15.2)	13.5 (10.3, 16.8)
Sex of last casual partner	Woman	342/366 (93.4)	93.8 (91.7, 95.9)
	Man	24/366 (6.6)	6.2 (4.1, 8.3)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Condom use at last sex with a casual partner	Yes	265/364 (72.8)	76.7 (72.8, 80.7)
	No	99/364 (27.2)	23.3 (19.3, 27.2)
	Don't know	2/366 (0.5)	-
3.18 Condom use at last sex with a casual partner (among those who had a casual sexual partner in the past 12 months) <sup>2,3</sup>	Yes	260/352 (73.9)	77.6 (73.8, 81.5)
	No	92/352 (26.1)	22.4 (18.5, 26.2)
	Don't know	2/354 (0.6)	-
Reasons for not using a condom (multiple answers)	Never heard of condoms	2/99 (2.0)	1.9 (0.0, 3.8)
	Don't know how to obtain a condom	6/99 (6.1)	5.9 (2.1, 9.7)
	I didn't think it was necessary	50/99 (50.5)	49.6 (40.5, 58.4)
	I didn't think of it	37/99 (37.4)	40.3 (31.7, 48.9)
	Not available	56/99 (56.6)	55.5 (47.5, 63.5)
	Too expensive	1/99 (1.0)	1.5 (0.0, 3.6)
	Partner objected	0/99 (0.0)	-
	Don't like them	1/99 (1.0)	0.6 (0.0, 1.3)
	Used another contraceptive	0/99 (0.0)	-
	Partner was faithful	2/99 (2.0)	2.1 (0.0, 4.2)
	Condoms takes away pleasure	4/99 (4.0)	3.4 (1.0, 5.8)
Other	1/99 (1.0)	1.0 (0.0, 2.4)	
HIV status of the last casual partner	HIV negative	117/366 (32.0)	29.4 (24.8, 34.0)
	HIV positive	0/366 (0.0)	-
	Did not know / ask	249/366 (68.0)	70.6 (66.0, 75.2)

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> Two respondents said they did not have a casual partner in the past 12 months; <sup>3</sup> % Said they used a condom the last time they had sex with a non-marital, non-cohabiting partner, of those who have had sex with such a partner in the last 12 months

About half (45.2%) of BB in Galle have never had a regular sexual partner. For a majority of BB in Galle, their last regular sexual partner was a woman (92.3%). Among BB in Galle who have had a regular sexual partner in the 12 months before the survey (52.3%) few (17.6%) have consistently used condoms during sex, although over half (52.3%) did use a condom at last sex with a regular sexual partner. Those who have not used a condom at last sex with a regular sexual partner in most cases did so because their partner was faithful (40.6%) or because they did not think using a condom was necessary (38.7%). Finally, as many as one in five (22.1%) BB in Galle did not know or ask their last regular sexual partner about her or his HIV status.

**Table 250: Regular Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sex of regular <sup>1</sup> partners	Only women	195/373 (52.3)	47.8 (42.5, 52.8)
	Only men	17/373 (4.6)	3.9 (2.4, 5.4)
	Both men and women	12/373 (3.2)	3.2 (1.6, 4.7)
	Never had a regular sexual partner	149/373 (39.9)	45.2 (40.0, 50.5)
Had a regular partner in the past 12 months	Yes	213/373 (57.1)	52.3 (47.1, 57.6)
Frequency of condom use in the past 12 months <sup>2</sup>	Every time	38/210 (18.1)	17.6 (12.1, 23.1)
	Almost every time	68/210 (32.4)	34.6 (27.5, 42.2)
	Sometimes	63/210 (30.0)	29.3 (23.1, 35.2)
	Never	41/210 (19.5)	18.6 (12.8, 24.1)
	Rather not say	1/211 (0.5)	-
Sex of last regular partner	Woman	207/224 (92.4)	92.3 (89.0, 95.6)
	Man	17/224 (7.6)	7.7 (4.4, 11.0)
Condom use at last sex with a regular partner	Yes	124/223 (55.6)	58.3 (51.3, 65.8)
	No	99/223 (44.4)	41.7 (34.2, 48.7)
	Don't know	1/224 (0.4)	-
Reasons for not using a condom (multiple answers)	Never heard of condoms	2/99 (2.0)	1.5 (0.0, 3.0)
	Don't know how to obtain a condom	3/99 (3.0)	2.6 (0.0, 5.2)
	I didn't think it was necessary	37/99 (37.3)	38.7 (29.8, 47.7)
	I didn't think of it	21/99 (21.2)	20.7 (13.2, 28.4)
	Not available	21/99 (21.2)	20.8 (14.2, 27.3)
	Too expensive	0/99 (0.0)	-
	Partner objected	5/99 (5.0)	5.9 (1.0, 10.8)
	Don't like them	1/99 (1.0)	1.0 (0.0, 2.3)
	Used another contraceptive	7/99 (7.1)	5.9 (2.4, 9.4)
	Partner was faithful	42/99 (42.4)	40.6 (31.6, 49.6)
	Condoms takes away pleasure	5/99 (5.0)	6.6 (1.3, 12.2)
How last regular partner was met	Brothel	8/199 (4.0)	4.1 (1.2, 7.0)
	Bar, café, disco or restaurant	9/199 (4.5)	5.1 (0.0, 13.8)
	Hotel	39/199 (19.6)	21.6 (14.6, 29.2)
	Street, park or public transport	5/199 (2.5)	1.9 (0.2, 3.3)
	Through friends	2/199 (1.0)	1.5 (0.1, 2.9)
	Internet (e.g. Facebook), chat, or SMS	28/199 (14.1)	13.1 (7.7, 18.3)
	Motel or Guest House	16/199 (8.0)	8.8 (3.3, 14.4)
	School	0/199 (0.0)	-
	Party	6/199 (3.0)	3.9 (2.9, 5.0)
	Intermediary	1/199 (0.5)	0.3 (0.2, 0.4)
	Service station	27/199 (13.6)	13.9 (8.1, 20.0)
	Truck stop	1/199 (0.5)	0.5 (0.0, 1.2)
	Massage Parlour / Spa	1/199 (0.5)	0.5 (0.0, 1.3)
	Other (telephone) <sup>3</sup>	0/199 (0.0)	-
	Other	31/199 (15.6)	13.6 (7.9, 18.8)
		25/199 (12.6)	11.3 (6.0, 16.1)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Rather not say	25/224 (11.2)	-
HIV status of the last regular partner	HIV negative	176/224 (78.6)	77.9 (73.1, 82.6)
	HIV positive	-	-
	Did not know / ask	48/224 (21.4)	22.1 (17.4, 26.9)

<sup>1</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis; <sup>2</sup> Two respondents said they did not have a regular partner in the past 12 months; <sup>3</sup> Recoded from answers to the open-ended question

### Use of Condoms and Lubricants

Very few (1.1%) of BB in Galle have never heard of condoms. Among those who have, most (92.0%) also know where to obtain condoms. Specifically, BB in Galle most often obtain condoms from government STD clinics (72.8%) and private pharmacies or chemists (66.2%). Most BB in Galle find condoms to be affordable (73.6%), although as many as one in four (23.1%) BB in Galle cannot tell if condoms are affordable or not. One in three BB in Galle (3.7%) have ever heard of lubricants and among them, one-third use lubricants usually or always (17.0 and 12.9%, respectively). Most, however, use saliva/water as lubricant (29.1%).

**Table 251: Use of condoms and lubricants**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of condoms	Yes	369/373 (98.9)	98.9 (98.0, 99.9)
	No	4/373 (1.1)	1.1 (0.1, 2.0)
Knows where to obtain condoms	Yes	345/369 (93.5)	92.0 (89.4, 94.7)
	No	24/369 (6.5)	8.0 (5.3, 10.6)
Usually obtains condoms from: (multiple response)	Government clinic - STD clinic	86/345 (24.9)	72.8 (67.6, 78.1)
	Govt. clinic - Not STD clinic	1/345 (0.3)	0.3 (0.0, 0.8)
	Private clinic	2/345 (0.6)	1.7 (0.0, 3.8)
	Private pharmacy or chemist	247/345 (71.6)	66.2 (60.3, 72.0)
	Traditional healer/herbalist	1/345 (0.3)	1.0 (0.0, 3.0)
	Neighbourhood market/stand	12/345 (3.5)	3.4 (1.6, 5.4)
	Friends	61/345 (17.7)	16.5 (12.9, 20.1)
	Sex partner/s	19/345 (5.5)	5.0 (2.9, 7.1)
	Bar / Nightclub	5/345 (1.4)	1.1 (0.4, 1.9)
	NGOs/ outreach service	77/345 (22.3)	19.0 (15.2, 22.9)
	Service station(s)	17/345 (4.9)	5.7 (3.0, 8.5)
I do not use condoms	40/345 (11.6)	10.5 (7.9, 13.1)	
Affordability of male condoms	Affordable	256/369 (69.4)	73.6 (69.6, 77.6)
	Somewhat affordable	11/369 (3.0)	2.7 (1.4, 4.0)
	Not affordable	4/369 (1.1)	0.6 (0.2, 0.9)
	Don't know	98/369 (26.6)	23.1 (19.2, 27.0)
Ever heard of lubricants	Yes	121/365 (33.2)	31.7 (26.7, 36.7)
	Don't know	8/373 (2.1)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Frequency of lubricant use during vaginal or anal sex	Always	17/121 (14.0)	17.0 (5.5, 28.3)
	Usually	14/121 (9.9)	12.9 (6.6, 19.2)
	Sometimes	19/121 (15.7)	16.4 (9.9, 22.9)
	Rarely	4/121 (3.3)	0.5 (0.2, 9.6)
	Never	67/121 (55.4)	48.8 (38.9, 58.8)
Type of lubricant used (multiple response)	Glycerine	12/54 (22.2)	17.6 (6.9, 28.4)
	Saliva or water	11/54 (20.4)	29.1 (9.2, 48.7)
	Vaseline	8/54 (14.8)	15.0 (6.7, 24.1)
	Baby oil	5/54 (9.3)	5.9 (1.7, 10.1)
	Lotion	4/54 (7.4)	5.0 (1.3, 8.7)
	Other oil	3/54 (5.6)	6.9 (0.0, 14.3)
	Water-based	3/54 (5.6)	4.7 (0.0, 9.6)
	Silicone-based	8/54 (14.8)	13.7 (5.8, 21.4)
	Soap	0/54 (0.0)	-
	Whatever we get from peer educator(s), Don't know what it is	5/54 (9.3)	8.5 (1.8, 15.1)
	Other	1/54 (1.9)	1.4 (0.0, 3.3)
Don't know	4/54 (7.2)	9.9 (0.0, 20.2)	

Four in five (81.9%) BB in Galle have ever heard of diseases that can be transmitted sexually. With regard to recognizing and describing symptoms of an STI, itching in women and men (38.8 and 41.5%%, respectively) and genital ulcers or sores in women and men (25.1% and 34.2%) were most commonly recognized symptoms. Very few had a symptom of a sexually transmitted infection (i.e., a discharge or genital ulcer (sore)) or received an STI diagnosis in the year preceding the survey (2.4 and 0.7%, respectively).

### Sexually Transmitted Infections

**Table 252: Sexually transmitted infections**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of diseases that can be transmitted sexually	Yes	298/367 (81.2)	81.9 (78.2, 85.6)
	No	69/367 (18.8)	18.1 (14.4, 21.8)
	Don't know	6/373 (1.6)	-
Can describe symptoms of sexually transmitted infections in women (multiple response)	1. Abdominal pain	8/298 (2.7)	2.6 (0.9, 4.2)
	2. Abnormal genital discharge	70/298 (23.5)	18.8 (14.7, 22.9)
	3. Burning pain on urination	34/298 (11.4)	12.5 (7.4, 17.7)
	4. Genital ulcers or sores	83/298 (27.9)	25.1 (20.6, 29.7)
	5. Swelling in groin area	15/298 (5.0)	4.4 (2.4, 6.3)
	6. Itching	85/298 (28.5)	38.8 (31.7, 46.2)
	Don't know any	104/195 (34.9)	28.9 (23.7, 34.2)
Symptoms mentioned (0-6)	0	104/298 (34.9)	28.9 (23.7, 34.2)
	1	110/298 (36.9)	44.4 (38.0, 50.9)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	2	69/298 (23.1)	22.4 (17.1, 27.8)
	3	13/298 (4.4)	3.7 (1.9, 5.5)
	4	2/298 (0.7)	0.5 (0.0, 0.9)
	5	0/298 (0.0)	-
	6	0/298 (0.0)	-
Can describe symptoms of sexually transmitted infections in men (multiple response)	1. Genital discharge	55/298 (18.4)	16.2 (11.8, 20.7)
	2. Burning pain on urination	23/298 (7.7)	6.2 (3.8, 8.6)
	3. Genital ulcers or sores	113/298 (37.9)	34.2 (28.2, 40.3)
	4. Swelling in groin area	57/298 (19.1)	15.2 (11.1, 19.3)
	5. Itching	94/298 (31.5)	41.5 (34.7, 48.3)
	Don't know any	88/298 (29.5)	25.1 (20.2, 29.9)
Symptoms mentioned (0-5)	0	88/298 (29.5)	25.1 (20.2, 29.9)
	1	110/298 (36.9)	45.0 (38.1, 51.7)
	2	71/298 (23.8)	22.4 (16.6, 28.5)
	3	26/298 (8.7)	6.8 (4.4, 9.2)
	4	3/298 (1.0)	0.7 (0.0, 1.6)
	5	0/298 (0.0)	-
Tested for sexually transmitted diseases in the past 3 months	Yes	85/373 (22.8)	21.7 (16.9, 26.4)
Received an STI diagnosis in the past 12 months	Yes	3/298 (1.0)	0.7 (0.2, 1.2)
Had a discharge or genital ulcer (sore) in the last 12 months	Yes	12/373 (3.2)	2.4 (1.4, 3.4)
Sought treatment <sup>1</sup>	Yes	11/12 (91.7)	-
Places where treatment was sought (multiple response) <sup>1</sup>	Government clinic - STD clinic	0/11 (0.0)	-
	Govt. clinic - Not STD clinic	0/11 (0.0)	-
	Private clinic	5/11 (45.4)	-
	Private pharmacy or chemist	6/11 (54.5)	-
	Traditional healer/herbalist	0/11 (0.0)	-
	I used medicine or herbs from home	0/11 (0.0)	-
Reasons for seeking treatment from that source (multiple response) <sup>1</sup>	Confidentiality	2/11 (18.2)	-
	Affordability	0/11 (0.0)	-
	Recommended by friend or acquaintance	5/11 (45.4)	-
	Quality and/or specialized care given at this place	0/11 (0.0)	-
	Knows the caregivers	0/11 (0.0)	-
	Known friendliness of the caregivers	2/11 (18.2)	-
	Proximity/location	3/11 (27.3)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Reasons for not seeking treatment (multiple response) <sup>1</sup>	Didn't know where to go for treatment	0/1 (0.0)	-
	Embarrassed or afraid to seek treatment	0/1 (0.0)	-
	Could not afford treatment	0/1 (0.0)	-
	Unable to get transportation	0/1 (0.0)	-
	Didn't think I needed it	1/1 (100)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

**Use of Prevention Programs**

Among BB in Galle who had ever tested for HIV, a majority were satisfied (12.9%) or very satisfied (83.0%) with the quality of services provided at the place where they received their last HIV test.

**Table 253: Contact with healthcare providers**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
<b>STI treatment</b>			
Satisfaction with how the healthcare provider treated them during this last visit <sup>1</sup>	Very satisfied	11/11 (100)	-
	Somewhat satisfied	-	-
	Not satisfied	-	-
<b>HIV testing</b>			
Satisfaction with the quality of services provided at the place where the last HIV test was received	Very satisfied	94/117 (80.3)	83.0 (74.9, 92.3)
	Satisfied	16/117 (13.7)	12.9 (5.5, 19.8)
	A little satisfied	5/117 (4.3)	3.0 (0.0, 5.9)
	Not satisfied	2/117 (1.7)	1.2 (0.0, 2.5)

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

In the year preceding the survey, one in four (24.8%) BB in Galle had sought medical care. Among them, one-third experienced difficulty getting medical care when they sought it.

**Table 254: Use of healthcare services in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sought medical care for any reason	Yes	111/371 (29.9)	24.8 (20.4, 29.1)
	No	260/371 (70.1)	75.2 (70.9, 79.6)
	Don't know	2/373 (0.5)	-
Had difficulty getting medical care when they sought it	Yes	32/111 (28.8)	27.9 (20.6, 35.34)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of difficulty (multiple response) <sup>1</sup>	Too expensive	1/32 (3.1)	(3.3 (0, 7.8))
	Too far away	5/32 (15.6)	(16.6 (5.5, 27.8))
	Could not take time from work	1/32 (3.1)	(2.9 (0, 6.9))
	Long waiting times	29/32 (90.6)	(88.7 (78.3, 98.9))

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

One in four (24.1%) BB in Galle have been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the three months preceding the survey. Among those who have, most have received condoms and lubricants (67.6%), or counselling on condom use and safe sex (45.8%). In addition, every fifth (21.7%) BB in Galle has tested for an STI in the three months preceding the survey. Coverage by HIV prevention programs, defined as receipt of at least two interventions (i.e., Given condoms and lubricant; Counselling on condom use and safe sex; Received an STI test) in the past three months, is low, at 14.7%.

**Table 255: Coverage of HIV prevention programs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the past 3 months	Yes	97/371 (26.1)	24.1 (19.3, 28.9)
	No	274/371 (73.9)	75.9 (71.2, 80.7)
	Don't know	2/373 (0.5)	-
Services received	General HIV/STI prevention/transmission information	23/97 (23.7)	21.6 (14.5, 28.9)
	Condoms and lubricants	64/97 (66.0)	67.6 (56.2, 78.8)
	Referral for STI treatment	14/97 (14.4)	16.0 (7.9, 23.8)
	Referral for VCT	1/97 (1.0)	0.6 (0.0, 1.3)
	Counselling on condom use and safe sex	49/97 (50.5)	45.8 (33.7, 56.9)
Tested for sexually transmitted diseases in the past 3 months	Yes	85/373 (22.8)	21.7 (16.9, 26.4)
3.7 Coverage of HIV prevention programs <sup>1</sup>		59/373 (15.8)	14.7 (10.6, 18.8)

<sup>1</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Tested for sexually transmitted infections in the past three months)

Very few BB in Galle have been refused health care (0.9%) and none have been refused police assistance on the basis of being a BB or because someone thought they had sex with tourists. Prevalence of verbal, physical, and sexual violence against them is also low, with 0.7% having experienced verbal insults.

## Experiences of Discrimination and Violence on the basis of being a BB / having sex with tourists

**Table 256: Experiences of Discrimination and Violence on the basis of being a BB / having sex with tourists**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Refused health care	Yes	4/371 (1.1)	0.9 (0.2, 1.5)
	No	367/371 (98.9)	99.1 (98.5, 99.8)
	Don't know	2/373 (0.5)	-
Refused police assistance	Yes	0/373 (0.0)	-
	No	372/372 (100)	-
	Don't know	1/373 (0.3)	-
Verbally insulted	Yes	3/370 (0.8)	0.7 (0.1, 1.3)
	No	367/370 (99.2)	99.3 (98.7, 99.9)
	Don't know	3/373 (0.8)	-
Hit, kicked, or beaten	Yes	0/372 (0.0)	-
	No	372/372 (100)	-
	Don't know	1/373 (0.3)	-
Sexually assaulted or raped	Yes	0/372 (0.0)	-
	No	372/372 (100)	-
	Don't know	1/373 (0.3)	-

## Use of Alcohol and Drugs

A majority of BB in Galle (88.8%) have ever had a drink containing alcohol, and among those who have, most have a drink containing alcohol less than once a week (54.3%).

**Table 257: Alcohol consumption**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had a drink containing alcohol	Yes	342/373 (91.7)	88.8 (84.4, 93.1)
Alcohol consumption in the past month	I never drink alcohol	-	-
	At least once a week	78/342 (22.8)	21.6 (17.3, 25.9)
	Less than once a week	175/342 (51.2)	54.3 (49.1, 59.5)
	Never in the past month	28/342 (8.2)	6.1 (4.3, 7.9)
	Every day	61/342 (18.8)	18.0 (14.4, 21.5)

Drug uses among BB in Galle is low, with the consumption of cannabis having the highest prevalence among all the listed types of drugs (49.2% of BB in Galle have used cannabis in the year before the survey). Few (2.9%) BB in Galle have ever injected drugs for non-medical purposes.

**Table 258: Use of non-prescribed/illicit drugs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of drug used			
Heroin	<i>Frequency of consumption</i>		
	Have never used	334/352 (94.9)	95.1 (93.3, 97.0)
	Never in the past 12 months	5/352 (1.4)	1.0 (0.4, 1.6)
	Monthly or less	1/352 (0.3)	0.3 (0.0, 0.7)
	Several times a month	-	-
	Two to four times a month	-	-
	Two to three times a week	5/352 (1.4)	1.5 (0.3, 2.6)
	Four or more times a week	5/352 (1.4)	1.4 (0.4, 2.4)
	Don't know	2/352 (0.6)	0.6 (0.0, 1.6)
Rather not say	21/373 (5.6)	-	
Cannabis	<i>Frequency of consumption</i>		
	Have never used	163/355 (45.9)	45.8 (40.7, 51.0)
	Never in the past 12 months	20/355 (5.6)	4.7 (2.8, 6.5)
	Monthly or less	7/355 (2.0)	1.9 (0.6, 3.2)
	Several times a month	16/355 (4.5)	6.2 (3.3, 9.2)
	Two to four times a month	31/355 (8.7)	11.1 (6.8, 15.1)
	Two to three times a week	54/355 (15.2)	14.1 (11.0, 17.3)
	Four or more times a week	62/355 (17.5)	15.9 (12.2, 19.5)
	Don't know	2/355 (0.6)	0.3 (0.0, 5.5)
Rather not say	18/373 (4.8)	-	
Cocaine	<i>Frequency of consumption</i>		
	Have never used	328/348 (94.2)	94.8 (92.9, 96.7)
	Never in the past 12 months	3/348 (0.9)	0.6 (0.1, 1.0)
	Monthly or less	1/348 (0.3)	0.2 (0.0, 0.6)
	Several times a month	-	-
	Two to four times a month	-	-
	Two to three times a week	2/348 (0.6)	0.7 (0.0, 1.5)
	Four or more times a week	-	-
	Don't know <sup>1</sup>	14/348 (4.0)	3.6 (1.9, 5.3)
Rather not say	25/373 (6.7)	-	
Ecstasy	<i>Frequency of consumption</i>		
	Have never used	277/347 (79.8)	83.0 (79.6, 86.5)
	Never in the past 12 months	-	-
	Monthly or less	-	-
	Several times a month	-	-
	Two to four times a month	-	-
	Two to three times a week	2/347 (0.6)	0.4 (0.0, 0.9)
	Four or more times a week	-	-
Don't know <sup>1</sup>	68/347 (19.6)	16.6 (13.1, 20.0)	
Rather not say	26/373 (7.0)	-	
Amphetamines	<i>Frequency of consumption</i>		
	Have never used	273/348 (78.4)	82.1 (78.3, 85.9)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Never in the past 12 months	1/348 (0.3)	0.2 (0.0, 0.6)
	Monthly or less	-	-
	Several times a month	-	-
	Two to four times a month	2/348 (0.6)	0.4 (0.0, 0.9)
	Two to three times a week	-	-
	Four or more times a week	-	-
	Don't Know <sup>1</sup>	72/348 (20.7)	17.3 (13.5, 21.0)
	Rather not say	25/373 (6.7)	-
Opium	<i>Frequency of consumption</i>		
	Have never used	277/348 (79.6)	82.9 (79.4, 86.6)
	Never in the past 12 months	-	-
	Monthly or less	-	-
	Several times a month	-	-
	Two to four times a month	-	-
	Two to three times a week	-	-
	Four or more times a week	-	-
Don't Know <sup>1</sup>	71/348 (20.4)	17.1 (13.4, 20.6)	
	Rather not say	25/373 (6.7)	-
Hashish	<i>Frequency of consumption</i>		
	Have never used	281/346 (81.2)	84.2 (80.9, 87.6)
	Never in the past 12 months	20/346 (5.8)	4.3 (2.8, 5.8)
	Monthly or less	2/346 (0.6)	0.6 (0.0, 1.4)
	Several times a month	1/346 (0.3)	0.2 (0.0, 0.4)
	Two to four times a month	2/346 (0.6)	0.4 (0.0, 1.0)
	Two to three times a week	5/346 (1.4)	1.2 (0.5, 2.0)
	Four or more times a week	1/346 (0.3)	0.2 (0.0, 0.6)
Don't Know <sup>1</sup>	34/346 (9.8)	8.7 (5.9, 11.5)	
	Rather not say	27/373 (7.2)	-
Other drugs	<i>Frequency of consumption</i>		
	Have never used	193/372 (51.2)	56.3 (51.3, 61.2)
	Never in the past 12 months	1/372 (0.3)	0.2 (0.0, 0.5)
	Monthly or less	1/372 (0.3)	0.2 (0.0, 0.5)
	Several times a month	6/372 (1.6)	2.1 (0.6, 3.5)
	Two to four times a month	24/372 (6.4)	7.3 (4.3, 10.2)
	Two to three times a week	35/372 (9.4)	8.4 (6.1, 10.8)
	Four or more times a week	103/372 (27.7)	23.3 (18.9, 27.8)
Don't Know	9/372 (24.2)	2.1 (0.8, 3.5)	
	Rather not say	1/373 (0.3)	-

<sup>1</sup> There is a significant proportion of the response 'Don't know.' Although it is possible that it refers to not knowing the frequency of drug use, it is more likely that it indicates never have heard of the particular type of drug.

**Table 259: Use of non-prescribed/illicit drugs by injection**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever injected drugs for non-medical purposes	Yes	12/366 (3.3)	2.9 (1.5, 4.2)
	No	354/366 (96.7)	97.1 (95.8, 98.5)
	Don't know	7/373 (1.9)	-
Ever used non-sterile injecting equipment when injecting drugs <sup>1</sup>	Yes	8/12 (66.7)	-
3.8 Safe injecting practice <sup>2</sup>		11/12 (91.2)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses. <sup>2</sup> % Used a sterile needle and syringe at last injection

**Table 260: Use of non-prescribed/illicit drugs by injection in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Injected drugs for non-medical purposes in the past 12 months <sup>1</sup>	Yes	4/12 (33.4)	-
Frequency of injecting drugs <sup>1</sup>	Monthly or less	1/4 (25.0)	-
	Two to four times a month	0/4 (0.0)	-
	Two to three times a week	3/4 (75.0)	-
	Four or more times a week	0/4 (0.0)	-
Type of drug that was injected (multiple response) <sup>1</sup>	Heroin	4/4 (100)	-
	Cocaine	0/4 (0.0)	-
	Crack cocaine	0/4 (0.0)	-
	Churus/Ash	0/4 (0.0)	-
	Meth/amphetamine	0/4 (0.0)	-
	Ganja Mal	0/4 (0.0)	-
	Methadone	0/4 (0.0)	-
	Kerala Ganja	0/4 (0.0)	-
	Ganja	0/4 (0.0)	-
	Sudol (tablet)	0/4 (0.0)	-
Rifernol (tablet)	0/4 (0.0)	-	

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Media

Regarding media use, BB in Galle most frequently watch TV (most days or every day: 80.2%) or surf the Internet (most days or every day: 74.6%). Much fewer also listen to the radio (most days or every day: 44.9%) or read the newspaper (most days or every day: 12.5%). Although Internet use is high, only 29.6% of BB in Galle use the Internet to find sexual partners. Finally, almost all (97.4%) BB in Galle have a mobile phone.

**Table 261: Use of media in the past 30 days**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Radio	Never	179/372 (48.1)	49.7 (44.3, 55.1)
	Once a month	7/372 (1.8)	3.3 (0.8, 5.8)
	Once a week	19/372 (5.1)	7.2 (4.1, 10.3)
	Most days	129/372 (34.7)	31.8 (27.3, 36.2)
	Every day	38/372 (10.2)	8.0 (6.0, 10.0)
	Rather not say	1/373 (0.3)	-
TV	Never	26/373 (7.0)	7.1 (4.8, 9.5)
	Once a month	1/373 (0.3)	0.3 (0.0, 0.7)
	Once a week	47/373 (12.6)	14.2 (9.6, 18.8)
	Most days	210/373 (56.3)	55.2 (50.0, 60.3)
	Every day	89/373 (23.9)	23.1 (19.3, 27.1)
Newspaper	Never	276/373 (74.0)	77.2 (73.4, 81.0)
	Once a month	6/373 (1.6)	1.6 (0.4, 2.8)
	Once a week	38/373 (10.2)	8.7 (6.2, 11.1)
	Most days	47/373 (12.6)	11.3 (8.5, 14.2)
	Every day	6/373 (1.6)	1.2 (0.5, 1.9)
Internet	Never	93/372 (25.0)	23.8 (19.8, 27.6)
	Once a month	0/372 (0.0)	-
	Once a week	1/372 (0.3)	1.7 (0.0, 3.9)
	Most days	121/372 (32.4)	30.9 (26.1, 35.7)
	Every day	157/372 (42.2)	45.1 (40.0, 50.3)
	Rather not say	1/373 (0.3)	-
Uses Internet to find sexual partners	Never	263/373 (70.5)	70.4 (65.5, 75.5)
	Once a month	11/373 (2.9)	2.8 (9.7, 4.7)
	Once a week	25/373 (6.7)	6.1 (4.1, 8.2)
	Most days	73/373 (19.6)	20.1 (15.4, 24.8)
	Every day	1/373 (0.3)	0.3 (0.0, 0.9)
Has a mobile phone	Yes	361/373 (96.8)	97.4 (96.2, 98.6)

### Multiplier questions

In May, June or July of 2017, 27.0% of BB in Galle have received any services (educational leaflets, condoms, HIV counselling) from the NGO Samadhi Foundation. The same proportion (27.0%) have received condoms from the same NGO and 21.6% were escorted by NGO Samadhi Foundation staff to an STI clinic. About one in five BB in Galle (15.1%) received a leather bracelet by peer educators during their outreach work in November 2017. Finally, 15.1% of BB in Galle participated in the first IBBS in Sri Lanka, implemented in 2014.

**Table 262: Multiplier questions**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Received any services (educational leaflets, condoms, HIV counselling) from the NGO Samadhi Foundation in Galle in May, June or July 2017	Yes	105/365 (28.2)	27.0 (22.2, 31.9)
	No	260/365 (71.2)	73.0 (68.1, 77.8)
	Don't know	8/373 (2.1)	-
Received condoms from the NGO Samadhi Foundation in Galle in May, June or July 2017	Yes	104/362 (28.7)	27.0 (21.9, 32.0)
	No	258/362 (71.3)	73.1 (68.0, 78.2)
	Don't know	11/373 (2.9)	-
Escorted to an STI clinic by the staff of the NGO Samadhi Foundation in Galle in May, June or July 2017	Yes	82/367 (22.3)	21.6 (16.8, 26.3)
	No	285/367 (77.7)	78.4 (73.7, 83.2)
	Don't know	6/373 (1.6)	-
Received a leather bracelet by peer educators (staff of the NGO Samadhi Foundation) in the week of 20-26 October during their outreach work	Yes	34/366 (9.3)	11.0 (6.5, 15.4)
	No	332/366 (90.7)	89.0 (84.6, 93.5)
	Don't know	7/373 (1.9)	-
Participated in the first IBBS in Sri Lanka in 2014	Yes	63/364 (17.3)	15.1 (11.8, 18.5)
	No	301/364 (82.7)	84.9 (81.5, 88.2)
	Don't know	9/373 (2.4)	-
	In Galle	63/63 (100)	-

### 3. Summary results

#### 3.5 TGW

##### 3.5.1. Colombo

A total of 254 TGW respondents were recruited in Colombo, including 3 seeds. For estimates, Gile's SS with population size estimate of 22,913 (low estimate<sup>17</sup> = 36,418 and high estimate<sup>18</sup> = 546,120), was used along with 0.95 confidence intervals, and 5,000 bootstraps. Across the tables presented below, because estimates based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

##### Homophily and Convergence

As previously mentioned, a homophily value of one means no homophily, while values above one show the presence of positive homophily (e.g. people are recruiting similar to themselves), and values below 1 mean negative homophily (e.g. people are recruiting different from themselves). In the TGW Colombo sample, the homophily ranged from 0.92 to 1.52, overall this can be interpreted as weak homophily. Four out of seven key indicators start to converge and population estimates show stability around the 200<sup>th</sup> participant. The remaining three indicators, age, avoidance of HIV services and condom use, show a tendency of converging nearing the end of sampling.

**Table 263: Homophily analysis**

	<i>Target indicator</i>	<i>Recruitment homophily</i>	<i>Estimated population homophily</i>
1	HIV prevalence among TGW (% HIV positive) <sup>1</sup>	-	-
2	Active syphilis among TGW <sup>2</sup>	-	-
3	Viral hepatitis among TGW (HBV) <sup>3</sup>	-	-
4	HIV and hepatitis co-infection among TGW <sup>3</sup>	-	-
5	Knowledge of HIV status among TGW <sup>4</sup> (% Know HIV status from an HIV test)	0.96	1.00
6	Coverage of HIV prevention programs among TGW <sup>5</sup> (% Reached with HIV/AIDS prevention programs)	0.92	0.94

<sup>17</sup> UNAIDS estimates the size of transgender people in Asia and Pacific region as 0.02% [2016]. Data are based on a literature review conducted by UNAIDS, GFATM, and WHO with assistance from other agencies. Other findings from the review were published in PLoS One (2016; 11(5): e0155150.) Data reflect population size estimates conducted between 2010 and 2015 in low and middle-income countries. The data are consistent with findings from similar exercises published in 2006 in Sexually Transmitted Infections (2006 Jun; 82(Suppl 3).) Using census data, the low estimate was calculated as 0.02% of the Sri Lankan population aged 15+ years.

<sup>18</sup> UNDP estimated transgender people in Asia-Pacific region as 0.30% [2012]. This figure broadly matches community estimates for numbers of trans\* women in countries such as India, Thailand and Malaysia, which gravitate around a prevalence rate of 1:30013, a figure that matches very closely one offered by Gates (2011)<sup>14</sup> for persons in the US who identify as trans\*. Using census data, the high estimate was calculated as 0.30% of the Sri Lankan population aged 15+ years.

	<i>Target indicator</i>	<i>Recruitment homophily</i>	<i>Estimated population homophily</i>
7	Condom use among TGW (% Used a condom the last time they had sexual intercourse or anal sex)	0.93*	0.97
8	Discriminatory attitudes towards PLHIV <sup>6</sup> (% who answer 'No' to at least one of the two questions)	1.09	0.98
9	Avoidance of HIV services because of stigma and discrimination among TGW <sup>7</sup> (% who answer 'Yes' to at least one of the reasons)	1.11	0.93
10	Age (% Mdn+)	1.04	0.95
11	Income (% 20,000 Rs.+)	1.05*	1.52

<sup>1</sup> Not calculated because there were only three positive cases. <sup>2</sup> Not calculated because there was one positive case. <sup>3</sup> Not calculated because there were not any HBV-positive cases <sup>4</sup> Tested and positive or tested in the past 12 months and negative. <sup>5</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Tested for STI). <sup>6</sup> Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?; Do you think that children living with HIV should be able to attend school with children who are HIV negative? <sup>7</sup> Did not seek HIV testing/prevention/treatment services because of: Fear of or concern about stigma by staff or neighbours; Fear of or concern about or experienced violence; Fear of or concern about or experienced police harassment or arrest. This Global AIDS Monitoring indicator has changed. Please see Global AIDS Monitoring 2018, pg. 96.

\*  $p < 0.05$

## Recruitment

Recruitment started with three initial respondents (seeds). Among them, two were almost equally productive, accounting for 25.6% and 23.6% of the total sample. Through the third seed, 50.8% of the total sample was recruited.

Figure 20. Recruitment tree – TGW Colombo

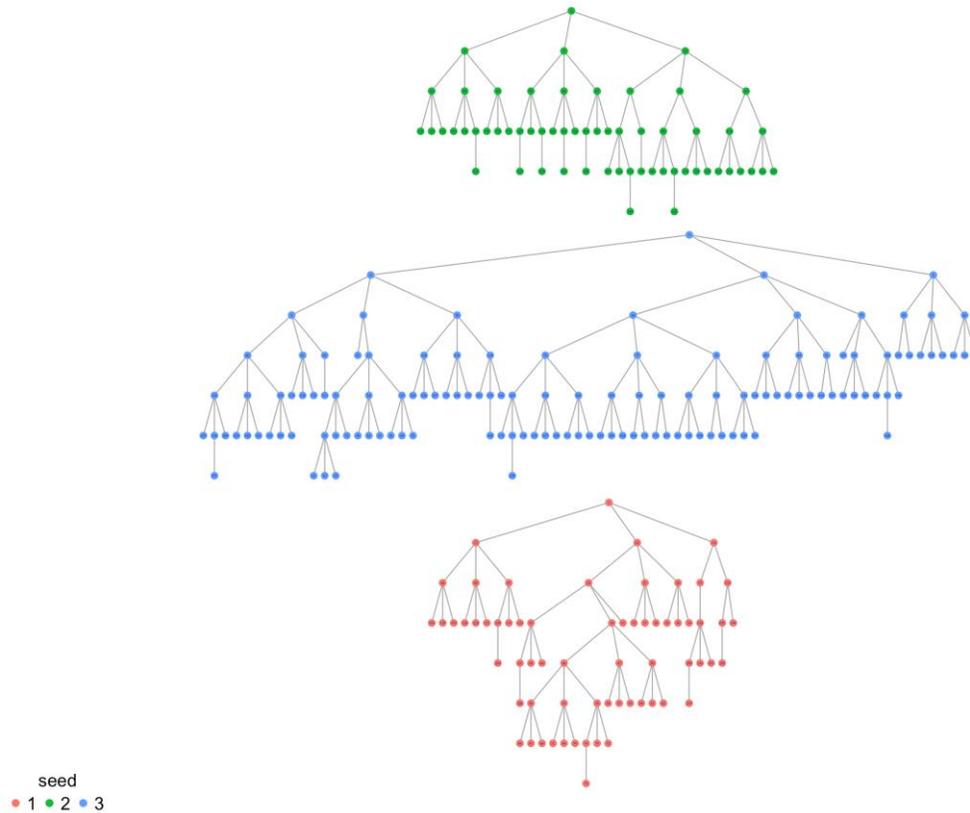


Table 264: Recruitment information

Characteristic	Responses	Sample proportion n/N (%)
Main reason for participation	Interest in HIV and sexual health	40/254 (15.7)
	HIV test	83/254 (32.7)
	Interest in issues related to TG people	124/254 (48.8)
	Helping the community	6/254 (2.4)
	Friend wanted me to participate	1/254 (0.4)
	Someone forced me	-
	Incentive/Gift	-
Mode of receiving the coupon	Received the coupon from a friend/ acquaintance	251/254 (98.8)
	Found the coupon laying around somewhere	-
	Bought or exchanged it for something	-
	Seed (from the IBBS office)	3/254 (1.2)
Acquaintances for:	< 6 months	32/251 (12.7)
	6 months – 1 year	67/251 (26.7)
	> 1 year	152/251 (60.6)
Screener’s confidence that participant is TGW	Confident	254/254 (100)
	Somewhat confident	-

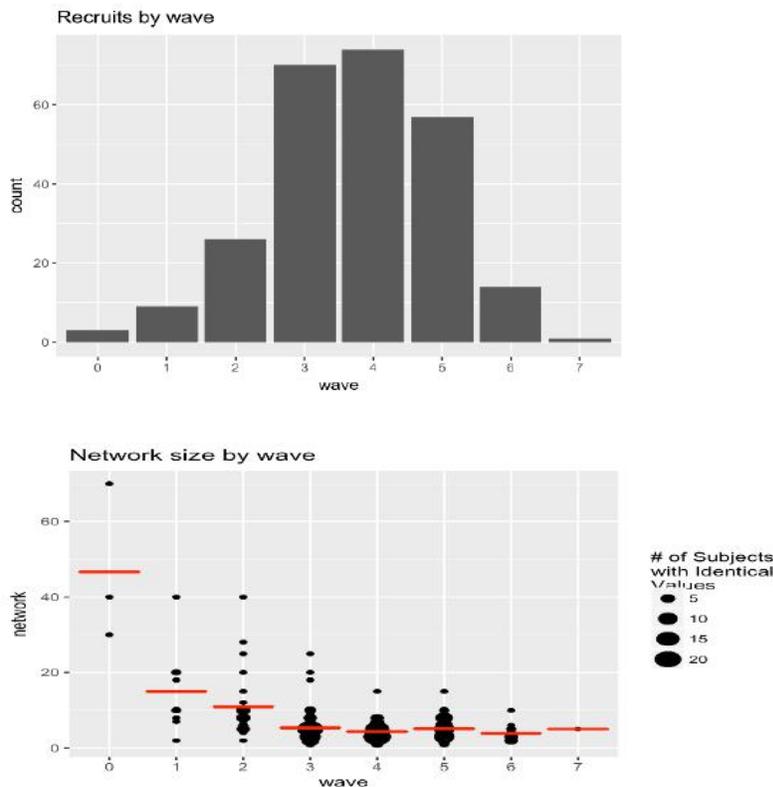
On average, study participants knew approximately thirteen other TGW. When asked how many of the TGW they knew who were at least 18 years of age, who lived in Colombo, and who they have seen in the past one month, on average, study participants knew six other TGW.

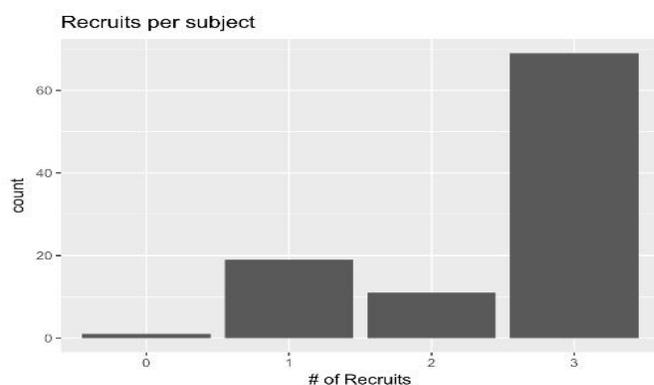
**Table 265: Network size questions**

Characteristic	Sample statistics
How many people do you know (they know your name and you know theirs) who were assigned to be a male at birth but who self-identify as a woman and have penetrative sex with men (transwomen)?	$M (SD) = 13.2 (17.03)$ Mdn = 10 Range = 2 - 200
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many are above the age of 18?	$M (SD) = 12.2 (15.26)$ Mdn = 9 Range = 2 - 190
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many live, work or study in _____ [city of survey]?	$M (SD) = 9.7 (11.79)$ Mdn = 7 Range = 2 - 150
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many have you seen in the past 1 month? <sup>1,2</sup>	$M (SD) = 6.3 (6.94)$ Mdn = 5 Range = 1 - 70

<sup>1</sup> One respondent answered with zero. Her answer for this question was changed to 1. <sup>2</sup> In the estimation of population frequencies and statistics, this question was used as the network size question.

**Figure 21. Recruitment diagnostics – TGW Colombo**





A total of seven waves was reached among TGW in Colombo, with the majority of respondents recruited in waves three and four (27.6 and 29.1%, respectively). As is expected, the mean network size is lower in subsequent waves, ranging from 47 (Mdn = 40) in wave zero, to four and five in the final, sixth and seventh, waves. Overall, recruitment in Colombo went well, with the majority of study participants recruiting into the study three other TGW.

### Biological Indicators

The prevalence of HIV amongst TWG in Jaffna is 0.6%, 0.3% for syphilis, and 0% for Hepatitis B. No cases of co-infection were found.

**Table 266: Biological test results**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Positive for HIV		3/254 (1.2)	0.6 (0.0, 1.3)
Positive for syphilis (VDRL)	Reactive	1/254 (0.4)	0.3 (0.0, 0.7)
Positive for syphilis (TPPA)		7/254 (2.8)	2.5 (0.5, 4.5)
Positive for syphilis (onsite testing)		10/254 (3.9)	3.0 (0.9, 5.1)
Positive for hepatitis B surface antigen		0/254 (0.0)	-
HIV and hepatitis co-infection		0/254 (0.0)	-

### Socio-Demographic Characteristics

All TGW in Colombo were born in Sri Lanka, have Sri Lankan citizenship and have lived in Colombo in the year prior to the survey. Primary residence for a majority of them is also Colombo (95.0%).

**Table 267: Citizenship and Residence**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Citizenship	Sri Lankan	254/254 (100)	-
Country of birth	Sri Lanka	254/254 (100)	-
District of residence in the past year	Colombo	254/254 (100)	-
Primary residence is Colombo	Yes	236/254 (92.9)	95.0 (92.7, 97.4)

The mean age of TGW in Colombo is 30.0 years, with three quarters (75.6%) younger than 35 years of age. With regard to ethnicity and language spoken at home, almost all (85.4 and 95.1%,

respectively) of TGW women in Colombo are Sinhalese. Almost all TGW in Colombo can read and write (98.1%) and very few have never attended formal education (0.8%). Over half of TGW in Colombo are in paid work (51.7%) and another third of them work occasionally (32.3%) and a majority of them earn at least 30,000 Sri Lankan Rupees per month (194 USD).

**Table 268: Core socio-demographic indicators**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Age	Sample <i>M (SD)</i> = 30.3 (7.86) Mdn = 28.0 <i>N</i> = 254 Range = 18 – 52	Pop. est. <i>M (SD)</i> = 30.0 (7.65) Mdn = 28.0 - -	-
Age groups	18 – 24 25 – 34 35 – 44 ≥ 45	65/254 (25.6) 121/254 (47.6) 52/254 (20.50) 16/254 (6.3)	26.0 (19.3, 32.8) 49.6 (42.2, 56.9) 18.2 (12.9, 23.3) 6.2 (2.9, 9.6)
Sex	Transwoman Woman Trans-sexual Nachchi	252/254 (99.2) 0/254 (0.0) 1/254 (0.4) 1/254 (0.4)	99.4 (98.4, 100) - 0.5 (0.0, 1.5) 0.1 (0.0, 0.2)
Sex same as at birth	Yes No	241/254 (94.9) 13/254 (5.1)	94.1 (90.1, 98.1) 5.9 (1.9, 9.8)
Ethnicity	Sinhalese Sri Lankan Tamil Indian Tamil Moor/Muslim Burgher Malay Other	216/254 (85.0) 30/254 (11.8) 3/254 (1.2) 5/254 (2.0) 0/254 (0.0) 0/254 (0.0) 0/254 (0.0)	85.4 (80.0, 90.8) 11.9 (7.0, 16.8) 11.9 (7.0, 16.8) 1.2 (0.0, 2.8) - - -
Languages spoken at home (multiple response)	Sinhalese Tamil English Other	243/254 (95.7) 18/254 (7.1) 1/254 (0.4) 0/254 (0.0)	95.1 (91.6, 98.6) 6.6 (3.0, 10.2) 0.2 (0.0, 0.6) -
Can read and write	Yes	248/254 (97.6)	98.1 (96.4, 99.8)
Completed level of education	Never attended school Grade 1-5 Grade 6-10 Passed O/L Passed A/L Completed Diploma Completed Degree	4/254 (1.6) 3/254 (1.2) 28/254 (11.0) 129/254 (50.8) 80/254 (31.5) 7/254 (2.8) 3/254 (1.2)	0.8 (0.0, 1.6) 0.7 (0.0, 1.6) 9.7 (6.0, 13.3) 51.0 (43.8, 58.3) 34.8 (27.3, 42.1) 2.4 (0.6, 4.1) 0.6 (0.0, 1.4)
Main activity	In paid work (including parental or other leave) Occasional work	120/254 (47.2) 87/254 (34.3)	51.7 (45.0, 58.4) 32.3 (26.6, 38.1)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	In unpaid or voluntary work	28/254 (11.0)	9.6 (6.1, 13.1)
	Unemployed	18/254 (7.1)	6.3 (3.1, 9.5)
	Student	0/254 (0.0)	-
	Retired	0/254 (0.0)	-
	Other	1/254 (0.4)	0.1 (0.0, 0.2)
Income	< 5,000 Rupees	1/252 (0.4)	0.1 (0.0, 0.3)
	5,000-10,000	4/252 (1.6)	0.7 (0.0, 1.5)
	10,001-20,000	17/252 (6.7)	4.4 (2.1, 6.6)
	20,001-30,000	50/252 (19.8)	20.3 (14.2, 26.3)
	30,001-40,000	104/252 (41.3)	41.8 (34.8, 48.9)
	> 40,000 Rupees	76/252 (30.2)	32.7 (26.3, 39.3)
	Don't know	1/254 (0.4)	0.5 (0.0, 1.4)
	Rather not say	1/254 (0.4)	-

Over half of TGW in Colombo live in their parents' home (58.6%). On average, TGW in Colombo live with two other people, and about one-third (29.1%) share their household with at least one child. Very few TGW women in Colombo are a parent or a guardian of a child (1.3%). Finally, one in three (33.4%) TGW in Colombo are currently in a relationship. For a majority, their partner is a man (97.1%).

**Table 269: Household information and family life**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of residence	Temporary shelter	30/254 (11.8)	8.1 (5.0, 11.1)
	Boarding house	36/254 (14.2)	17.5 (10.8, 24.1)
	Parents' home	143/254 (56.3)	58.6 (51.2, 66.0)
	My own home	44/254 (17.3)	15.5 (10.5, 20.5)
	Lodging	1/254 (0.4)	0.1 (0.0, 0.3)
	On the street	0/254 (0.0)	-
	Brothel	0/254 (0.0)	-
	Other	0/254 (0.0)	-
Number of household members	Sample $M (SD) =$ 3.6 (1.32) Mdn = 3.0 $N = 247$ Range = 1 - 9	Pop. est. $M (SD) =$ 3.4 (1.27) Mdn = 3.0 Range = n/a	-
Number of children currently living in the household	No children	171/246/246(69.5)	71.0 (64.9, 77.0)
	One	51/246 (20.7)	20.9 (15.2, 26.6)
	Two	19/246 (7.7)	6.6 (3.4, 9.7)
	Three or more	5/246 (2.2)	1.6 (0.3, 2.8)
	Don't know	8/254 (3.1)	-
Number of children	No children	239/244 (98.0)	98.7 (97.7, 99.7)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	One	3/244 (1.2)	0.7 (0.0, 1.4)
	Two	1/244 (0.4)	0.4 (0.0, 1.0)
	Three or more	1/244 (0.4)	0.2 (0.0, 0.5)
	Don't know	10/254 (3.9)	-
Marital status	Single (Never married)	248/253 (98.0)	99.3 (98.6, 99.9)
	Married	4/253 (1.6)	0.5 (0.0, 1.1)
	Divorced/Separated	1/253 (0.4)	0.2 (0.0, 0.6)
	Widowed	0/253 (0.0)	-
	Rather not say	1/254 (0.4)	-
Cohabitation	Living together with a partner/spouse	17/250 (6.8)	6.1 (2.6, 9.6)
	Involved in a relationship without living together	169/250 (67.6)	66.6 (59.7, 73.3)
	Have no relationship/Do not have a partner	64/250 (25.6)	27.3 (21.3, 33.4)
	Rather not say	4/254 (1.6)	-
Sex of partner	Woman	6/184 (3.3)	2.9 (0.2, 5.5)
	Man	178/184 (96.7)	97.1 (94.5, 99.8)
	Rather not say	2/186 (1.1)	-

## HIV/AIDS

About one in four TGW in Colombo have never heard of HIV/AIDS (21.7%). Among those who have, close to half (45.7%) have received the most thorough information about HIV/AIDS from NGOs. Among TGW in Colombo who have heard of HIV/AIDS, close to half (44.2%) have never discussed HIV/AIDS with any of their partners. Finally, as many as one in three (37.6%) TG women in Colombo know somebody who is HIV-positive or has died of AIDS.

**Table 270: General knowledge about HIV/AIDS**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has heard of HIV/AIDS	Yes	194/254 (76.4)	78.3 (72.8, 83.7)
Main source of the most thorough understanding of HIV/AIDS	School	16/194 (8.2)	10.5 (4.4, 16.6)
	Health services	13/194 (6.7)	4.4 (1.7, 7.3)
	Workplace	3/194 (1.5)	1.5 (0.0, 3.4)
	Friends/Family	9/194 (4.6)	3.9 (0.5, 7.3)
	Television	4/194 (2.1)	2.3 (0.5, 4.2)
	Newspaper/Magazines	18/194 (9.3)	9.0 (4.6, 13.2)
	Posters/Billboards	17/194 (8.8)	11.9 (6.0, 18.1)
	Pamphlets/Leaflets	18/194 (9.3)	9.8 (3.7, 15.8)
	Radio	3/194 (1.5)	0.9 (0.3, 1.4)
	NGOs	93/194 (47.9)	45.7 (37.8, 53.6)
Discussed HIV with any sexual partner	Yes, all	14/194 (7.2)	5.6 (1.8, 9.4)
	Yes, some	97/194 (50.0)	49.9 (41.3, 58.5)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	No, none	82/194 (42.3)	44.2 (35.9, 52.6)
	Don't know	1/194 (0.5)	0.2 (0, 0.6)
Partner ever disclosed their HIV status	Yes, all	12/111 (10.8)	9.3 (1.8, 16.8)
	Yes, some	90/111 (81.1)	83.1 (73.8, 92.5)
	No, none	4/111 (3.6)	3.0 (0, 6.4)
	Don't know	5/111 (4.5)	4.5 (0.5, 9.5)
Knows somebody who is HIV-positive or has died of AIDS	Yes	71/194 (36.6)	37.6 (29.2, 56.0)
	No	123/194 (63.4)	62.4 (54.0, 70.1)
Close friend or relative died of AIDS (multiple response)	Yes, close relative	0/193 (0.0)	-
	Yes, close friend	16/193 (8.3)	6.8 (0.3, 10.8)
	Yes, close relative and close friend	1/193 (0.5)	0.2 (0, 0.7)
	No	174/193 (90.2)	92.3 (88.2, 96.5)
	Don't know	2/193 (1.0)	0.6 (0, 1.3)
	Rather not say	1/194 (0.5)	-

About one in four (24.8%) TGW in Colombo cannot gauge their personal risk of HIV. Among the one-third (29.1%) who believe their risk is none or low, most think so because they trust their partner (72.2%). Among TGW in Colombo who perceive their risk of HIV as moderate or high (45.9%), most believe so because they have had many sexual partners (86.8%).

**Table 271: Perception of personal HIV risk**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Personal HIV risk	No risk	51/254 (20.1)	21.9 (15.5, 28.3)
	Low risk	19/254 (7.5)	7.2 (3.7, 10.8)
	Moderate risk	21/254 (8.3)	5.5 (3.7, 10.7)
	High risk	99/254 (39.0)	40.4 (33.4, 47.5)
	Don't know	64/254 (25.2)	24.8 (18.9, 30.8)
Reasons for perceiving the risk as moderate or high (multiple response)	Many sexual partners	103/120 (85.8)	86.8 (79.9, 93.6)
	Didn't always use condoms	7/120 (5.8)	4.4 (0.7, 8.1)
	Injected drugs	0/120 (0.0)	-
	Partner has other partners	15/120 (12.5)	12.4 (5.8, 19.2)
	Don't know	2/120 (1.7)	1.0 (0.0, 2.4)
Reasons for perceiving no or low risk (multiple response)	Trust my partner/s	48/70 (68.6)	72.2 (61.7, 82.9)
	Always use condoms	33/70 (47.1)	39.5 (26.1, 52.7)

Knowledge about HIV prevention is somewhat low among TGW in Colombo, with two in three (67.2%) of them being able to correctly identify four or five modes of sexual transmission of HIV and/or reject major misconceptions about transmission of HIV. When looking at specific items that the composite indicator consists of, a majority of TGW in Colombo know that the risk of getting HIV can be reduced by using a condom every time one has sex (72.5%) and that a healthy-looking

person can have HIV (70.5%). Much fewer also know that a person cannot get HIV by sharing food with someone who is infected (24.8%).

**Table 272: GAM 5.1 Knowledge about HIV prevention, disaggregated by age**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners	<u>Among all</u> Yes	165/254 (65.0)	69.8 (64.0, 75.6)
	<u>Among those aged 18 – 24</u> Yes	46/65 (70.8)	75.1 (62.0, 88.7)
Person can reduce the risk of getting HIV by using a condom every time he/she has sex	<u>Among all</u> Yes	173/254 (68.1)	72.5 (66.8, 78.2)
	<u>Among those aged 18 – 24</u> Yes	46/65 (70.8)	76.5 (64.9, 88.5)
Healthy-looking person can have HIV	<u>Among all</u> Yes	168/254 (66.1)	70.5 (64.7, 76.5)
	<u>Among those aged 18 – 24</u> Yes	45/65 (69.2)	73.3 (61.6, 85.0)
Person cannot get HIV from mosquito bites	<u>Among all</u> Yes	168/254 (66.1)	68.9 (63.3, 74.8)
	<u>Among those aged 18 – 24</u> Yes	48/65 (73.8)	78.2 (66.7, 90.0)
Person cannot get HIV by sharing food with someone who is infected	<u>Among all</u> Yes	70/254 (27.6)	24.8 (18.8, 31.0)
	<u>Among those aged 18 – 24</u> Yes	14/65 (21.5)	22.1 (9.0, 36.0)
Composite indicator for knowledge about HIV prevention (1-5 <sup>1</sup> )	# of correct answers		
	<u>Among all</u>		
	None	64/254 (25.2)	23.0 (17.4, 28.5)
	One	8/254 (3.1)	2.2 (0.8, 3.7)
	Two	13/254 (5.1)	3.6 (1.5, 5.7)
	Three	9/254 (3.5)	4.0 (1.3, 6.7)
	Four	117/254 (46.1)	50.7 (43.7, 57.6)
	Five	43/254 (16.9)	16.5 (10.9, 22.1)
	<u>Among those aged 15-24</u>		
	None	14/65 (21.5)	18.4 (4.0, 32.9)
	One	2/65 (3.1)	2.4 (0.0, 10.0)
	Two	4/65 (6.2)	3.8 (0.4, 7.1)
	Three	2/65 (3.1)	5.8 (0.0, 18.9)
	Four	32/65 (49.2)	50.3 (37.0, 63.8)
Five	11/65 (16.9)	19.3 (6.2, 32.2)	
HIV can be transmitted from mother to her unborn child	Yes	192/254 (75.6)	78.9 (73.3, 84.4)
	No	54/254 (21.3)	18.9 (13.6, 24.1)
	Don't know	8/254 (3.1)	2.3 (0.6, 4.0)
Ever heard of ART	Yes	196/254 (77.2)	80.7 (75.4, 86.1)
	No	57/254 (22.4)	19.2 (13.8, 24.5)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Don't know	1/254 (0.4)	0.1 (0.0, 0.2)

<sup>1</sup> Don't know is recorded as incorrect. Numerator for individual and the composite indicator excludes those who have never heard of HIV/AIDS, while all who had a valid answer to the question regarding whether they had ever heard of HIV/AIDS are included in the denominator.

Among TGW in Colombo who have ever heard of HIV/AIDS, one in three (30.7%) exhibits a discriminatory attitude towards PLHIV, with somewhat more saying that they would not buy fresh vegetables from a shopkeeper or vendor if she knew that this person had HIV (24.0%) than saying that they think children living with HIV should not be able to attend school with children who are HIV negative (19.9%).

**Table 273: GAM 4.1 Discriminatory attitudes towards PLHIV, disaggregated by age**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Thinks that children living with HIV should be able to attend school with children who are HIV negative <sup>1</sup>	<u>Among all</u>		
	Yes	156/194 (80.4)	80.1 (73.2, 87.0)
	No	38/194 (19.6)	19.9 (13.0, 26.8)
	Don't Know/Not sure/It depends	0/194 (0.0)	-
	<u>Among those aged 18-49</u>		
	Yes	154/192 (80.2)	79.8 (72.9, 86.7)
	No	38/192 (19.8)	20.3 (13.4, 27.1)
	Don't know/Not sure/It depends	0/192 (0.0)	-
	<u>Among those aged 25-49 years</u>		
Yes	110/141 (78.0)	79.1 (71.3, 86.9)	
No	31/141 (22.0)	20.9 (13.1, 28.7)	
Don't know/Not sure/It depends	0/141 (0.0)	-	
Would buy fresh vegetables from a shopkeeper or vendor if he/she knew that this person had HIV? <sup>1</sup>	<u>Among all</u>		
	Yes	148/194 (76.3)	76.0 (68.9, 83.1)
	No	46/194 (23.7)	24.0 (16.9, 31.1)
	Don't Know/Not sure/It depends	0/194 (0.0)	-
	<u>Among those aged 18-49</u>		
	Yes	148/192 (77.1)	77.5 (70.5, 84.5)
	No	44/192 (22.9)	22.5 (15.5, 29.5)
	Don't know/Not sure/It depends	0/192 (0.0)	-
	<u>Among those aged 25-49 years</u>		
Yes	103/141 (73.0)	73.3 (64.5, 82.1)	
No	38/141 (27.0)	26.7 (17.9, 35.5)	
Don't know/Not sure/It depends	0/141 (0.0)	-	
Composite indicator for discriminatory attitudes towards PLHIV (1-2 <sup>1</sup> )	Responded 'No' to either of the two questions		]
	<u>Among all</u>	55/194 (28.4)	30.7 (22.5, 38.8)
	<u>Among those aged 18-49</u>	53/192 (27.6)	29.3 (21.3, 37.4)
	<u>Among those aged 25-49</u>	44/141 (31.2)	30.7 (21.3, 40.2)

<sup>1</sup> Participants who responded don't know/not sure/it depends and those who refused to answer were excluded from the analysis. Numerator: Number of respondents who respond no to either of the two questions; Denominator: Number of all respondents who have heard of HIV.

Three-quarters (76.0%) of TGW in Colombo know where to receive an HIV test, with a majority (94.9%) mentioning government STI clinics as a place that they know offers an HIV test. About half of TGW in Colombo have ever tested for HIV (54.4), and close to half (43.1%) have received an HIV test within 12 months before the survey was carried out. Among those who ever did receive an HIV test, almost all (94.7%) have received their last HIV test at a government STI clinic.

**Table 274: HIV testing**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Knows where to receive an HIV test		195/254 (76.8)	76.0 (70.0, 81.9)
Places that offer HIV testing (multiple response)	Government clinic – STI	188/195 (96.4)	94.9 (90.4, 99.4)
	Government clinic – non-STI	8/195 (4.1)	1.2 (0.1, 2.2)
	Private clinic	25/195 (12.8)	13.8 (7.8, 19.7)
	Private pharmacy or chemist	5/195 (2.6)	2.7 (0.0, 6.4)
	Traditional healer/herbalist	0/195 (0.0)	
Knows HIV status from an HIV test	No, I have never been tested	98/247 (39.7)	45.6 (38.6, 52.6)
	Yes, I have been tested	149/247 (60.3)	(47.4, 61.4)
	Rather not say	7/254 (2.8)	-
Last HIV test	< 6 months	59/149 (39.6)	39.1 (26.8, 51.3)
	6 – 12 months	56/149 (37.6)	40.0 (28.9, 51.4)
	> 12 Months	33/149 (22.1)	20.4 (14.1, 26.7)
	Don't know	1/149 (0.7)	0.4 (0, 1.2)
Result of last HIV test	Negative	145/149 (97.3)	97.9 (95.6, 100)
	Positive	1/149 (0.7)	0.6 (0, 1.9)
	Indeterminate	0/149 (0.0)	-
	Didn't receive the result	1/149 (0.7)	0.5 (0, 1.5)
	Don't know	2/149 (1.3)	0.1 (0, 2.6)
Composite indicator for knowledge of HIV status <sup>1</sup> (1-3)	Yes	115/247 (46.6)	43.1 (36.1, 50.1)
Last HIV test was voluntary	Yes	141/149 (94.6)	95.0 (90.5, 99.5)
	No	8/149 (5.4)	5.0 (0.5, 9.4)
Place where last HIV test was received	Government clinic – STI	142/149 (95.3)	94.7 (90.4, 99.0)
	Government clinic – non-STI	1/149 (0.7)	0.2 (0, 0.4)
	Private clinic	5/149 (3.4)	4.7 (0.3, 9.1)
	Private pharmacy or chemist	0/149 (0.0)	-
	Traditional healer/herbalist	0/149 (0.0)	-
	Don't know	1/149 (0.7)	0.4 (0, 1.1)

<sup>1</sup> Numerator: Number of respondents who tested HIV-positive or who tested in the past 12 months and the result was negative; Denominator: Number of respondents who provided a valid answer to the question about their knowledge about their HIV status from an HIV test.

Among TGW in Colombo who have never received an HIV test, a majority said it was because they either do not know where to go (39.4%) or because the testing location is inconvenient (39.6%). Almost half (48.3%) of TGW women in Colombo avoid HIV services because of stigma and discrimination, namely due to fear or concern about stigma by staff or neighbours (35.9%).

**Table 275: Reasons for never receiving an HIV test**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Reasons for never receiving an HIV test (multiple response)	Don't know where to go	42/96 (43.8)	39.4 (28.4, 50.6)
	I always use condoms	5/96 (5.2)	3.9 (0.1, 7.8)
	Not at risk of getting HIV	10/96 (10.4)	11.1 (3.4, 18.8)
	Didn't have time/Too busy	17/96 (17.7)	17.2 (8.1, 26.3)
	I trust my partner	13/96 (13.5)	15.6 (6.7, 24.5)
	Afraid of knowing I may be HIV-positive	21/96 (21.9)	23.1 (13.4, 32.8)
	Lack of confidentiality	17/96 (17.7)	20.1 (11.1, 29.1)
	Inconvenient testing location	37/96 (38.5)	39.6 (28.8, 50.3)
	No money	6/96 (6.2)	5.1 (0.7, 9.5)
Never receiving an HIV test because of stigma and discrimination (multiple response)	Fear or concern about stigma by staff or neighbours	31/96 (32.3)	35.9 (23.4, 48.4)
	Fear of or concern about or experienced violence	5/96 (5.2)	3.8 (0.4, 7.2)
	Fear of or concern about or experienced police harassment or arrest	7/96 (7.3)	8.8 (1.4, 16.2)
Composite indicator for avoidance of HIV services because of stigma and discrimination (1-3)		42/96 (43.8)	48.3 (36.1, 60.3)

### Sexual Behaviour

Few TGW in Colombo have ever had sex with a woman (7.1%). At first anal sex with a man, TGW in Colombo were on average 15 years of age. Their first male partner was on average somewhat older, at 19 years of age. Finally, over half (57.7%) of TGW in Colombo visit outdoor sites (such as parks, streets, bus stations, etc.) to find partners.

**Table 276: General sexual history**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had sex with a woman (vaginal or anal intercourse)	Yes		22/252 (8.7)	7.1 (4.0, 10.2)
	No		230/252 (91.3)	92.9 (89.8, 96.0)
	Don't know		1/254 (0.4)	-
	Rather not say		1/254 (0.4)	-
Type of sex ever had with men	Only oral sex		2/254 (0.8)	0.1 (0, 0.2)
	Only anal sex		7/254 (2.8)	1.9 (0.2, 3.7)
	Oral sex and anal sex		245/254 (96.5)	97.9 (96.2, 99.6)
Age at first anal sex with a man	Sample <i>M (SD)</i> = 15.2 (2.62) Mdn = 15.0 <i>N</i> = 249 Range = 8 - 31	Pop. est. <i>M (SD)</i> = 15.1 (2.68) Mdn = 15.0 - -	-	-
	< 18		211/249 (84.7)	87.0 (82.9, 91.2)
Age of partner at first anal sex with a man	Sample <i>M (SD)</i> = 19.6 (5.50) Mdn = 18.0 <i>N</i> = 248 Range = 10 - 40	Pop. est. <i>M (SD)</i> = 18.9 (5.20) Mdn = 18.0 - -	-	-
	Yes		147/254 (57.9)	57.7 (50.1, 64.4)
Visits outdoor sites (such as parks, streets, bus stations, etc.) to find partners				

In the seven days before the survey, TGW in Colombo on average had four sexual partners, with only very few not having any sexual partners during this period.

**Table 277: Sexual partners in the past 7 days**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of all sexual partners	Sample <i>M (SD)</i> = 4.4 (3.06) Mdn = 3.0 <i>N</i> = 254 Range = 0 - 20	Pop. est. <i>M (SD)</i> = 4.1 (2.78) Mdn = 3.0 - -	-	-
	0		5/254 (2.0)	0.1 (0, 2.1)
	1		20/254 (7.9)	9.4 (5.1, 13.6)
	2 or more		229/254 (90.2)	89.6 (85.2, 93.9)
Number of casual <sup>1</sup> sexual partners (among	Sample <i>M (SD)</i> =	Pop. est. <i>M (SD)</i> =	-	-

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
those who had at least one sexual partner in the past 7 days)	3.1 (2.63) Mdn = 2.0 N = 249 Range = 0 – 18	2.7 (2.32) Mdn = 2.0 - -		
	0 1 2 or more		30/249 (12.0) 38/249 (15.3) 181/249 (72.7)	15.5 (9.6, 21.6) 15.4 (10.1, 20.6) 69.1 (62.3, 75.8)
Number of regular <sup>2</sup> sexual partners (among those who had at least one sexual partner in the past 7 days)	Sample M (SD) = 1.5 (1.07) Mdn = 1.0 N = 249 Range = 0 – 7	Pop. est. M (SD) = 1.4 (1.10) Mdn = 1.0 - -	-	-
	0 1 2 or more		35/249 (14.1) 115/249 (46.2) 99/249 (39.8)	14.4 (9.1, 19.5) 46.0 (39.0, 53.0) 39.6 (33.2, 46.0)
Number of female sexual partners (among those who ever had vaginal sex with a woman) <sup>1,2</sup>	0 1 Rather not say		14/17 (82.4) 3/17 (17.6) 2/19 (10.5)	- - -

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses. <sup>2</sup> Due to an error in routing, three respondents did not provide an answer to this question.

In the six months preceding the survey, TGW in Colombo had a mean of 18 sexual partners, with as many as 90.5% having had five or more sexual partners. With regard to type of relationship, TGW in Colombo on average had two times as many casual (13) than regular (six) sexual partners. Finally, at last anal sex with a man, a majority (86.3%) of TGW in Colombo used a condom.

**Table 278: Male sexual partners in the past 6 months**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of <b>male</b> sexual partners	Sample M (SD) = 18.7 (10.0) Mdn = 20.0 N = 252 Range = 0 – 60	Pop. est. M (SD) = 18.0 (9.53) Mdn = 20.0 - -	-	-
	0 1 – 2 3 – 4 5 or more		2/252 (0.8) 8/252 (3.2) 14/252 (5.6) 228/252 (90.5)	0.3 (0.0, 0.6) 2.3 (0.7, 3.8) 7.0 (3.2, 10.8) 90.5 (86.4, 94.5)

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of casual <sup>1</sup> sexual partners (among those who had at least 1 male sexual partner in the last 6 months)	Sample <i>M (SD)</i> = 13.3 (8.42) Mdn = 14.0 <i>N</i> = 250 Range = 0 – 59	Pop. est. <i>M (SD)</i> = 12.6 (7.99) Mdn = 13.0 - -	-	-
	0		21/250 (8.4)	9.9 (5.1, 14.6)
	1		7/250 (2.8)	3.3 (0.9, 5.6)
	2		6/250 (2.4)	1.4 (0.3, 2.4)
	3 or more		216/250 (86.4)	85.5 (80.1, 90.9)
Number of regular <sup>2</sup> sexual partners (among those who had at least 1 sexual male partner in the last 6 months)	Sample <i>M (SD)</i> = 5.6 (3.97) Mdn = 5.0 <i>N</i> = 250 Range = 0 – 30	Pop. est. <i>M (SD)</i> = 5.5 (3.57) Mdn = 5.0 - -	-	-
	0		17/250 (6.8)	6.7 (2.8, 10.7)
	1		15/250 (6.0)	3.9 (2.1, 5.8)
	2		21/250 (8.4)	8.2 (4.5, 11.9)
	3 or more		197/250 (78.8)	81.1 (75.5, 86.8)
Condom use at last anal sex with a male partner	Yes		215/247 (87.0)	86.3 (81.2, 91.5)
	No		32/247 (13.0)	13.7 (8.5, 18.8)
	Do not remember		3/251 (1.2)	-

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis

A majority (88.8%) of TGW in Colombo had ever received money, goods or services in exchange for sex. Among them, almost all (99.4%) have received money, goods or services in exchange for sex in the past 12 months, with their last paying partner, in most cases (96.7%), being a man. Three in four (76.0%) TGW in Colombo have ever given money, goods or services in exchange for sex and among them, 92.9% had given money, goods or services in exchange for sex in the past 12 months, with their last partner, in most cases (99.4%) being a man. Condom use at last transactional sex was high; 90.9% used a condom at last sex they were paid for, and 92.7% used a condom at last sex they paid for.

**Table 279: Transactional Sex**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever received money, goods or services in exchange for sex	Yes	226/254 (89.0)	88.8 (84.2, 93.4)
Received money, goods or services in exchange for sex in the past 12 months	Yes	225/226 (99.6)	99.4 (98.3, 100)
Received money, goods or services in exchange for <u>anal sex with a man</u> in the past 12 months	Yes	223/224 (99.6)	99.4 (98.3, 100)
Sex of partner at last sex for which money was received	Woman	6/226 (2.7)	3.3 (0.5, 6.1)
	Man	220/226 (97.3)	96.7 (93.9, 99.5)
Used a condom at last sex for which money was received	Yes	203/225 (90.2)	90.9 (86.9, 94.9)
	Don't remember	1/226 (0.4)	-
Ever given money, goods or services in exchange for sex	Yes	197/254 (77.6)	76.0 (69.7, 82.3)
Gave money, goods or services in exchange for sex with in the past 12 months	Yes	184/197 (93.4)	92.9 (88.1, 97.9)
Sex of partner at last sex for which money was given	Woman	2/197 (1.0)	0.8 (0.1, 2.1)
	Man	195/197 (99.0)	99.4 (98.7, 100)
Used a condom at last sex for which money, goods or services were given	Yes	180/197 (91.4)	92.7 (88.9, 96.7)

Nine in ten (89.8%) TGW in Colombo had a casual male sexual partner in the six months before the survey. Among them, most have used a condom consistently (54.0%) or almost every time (30.5%) in the past six months, with 87.5% having had used a condom at last anal sex with a casual partner. Those who have not used a condom at last anal sex with a casual sexual partner in most cases did so because their partner objected (56.0%) or because a condom was not available (27.2%). Finally, one in three (35.5%) TGW in Colombo did not know or ask their last casual male sexual partner about his HIV status.

**Table 280: Casual Male Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Had a casual <sup>1</sup> male partner in the past 6 months	Yes	229/254 (90.2)	89.8 (85.2, 94.5)
Frequency of condom use in the past 6 months	Every time	115/229 (50.2)	54.0 (47.4, 60.7)
	Almost every time	74/229 (32.3)	30.5 (24.3, 36.7)
	Sometimes	33/229 (14.4)	12.0 (7.8, 16.3)
	Never	7/229 (3.1)	3.4 (0.8, 6.1)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Condom use at last anal sex with a casual partner	Yes	200/229 (87.3)	87.5 (82.9, 92.2)
Reasons for not using a condom (multiple answers) <sup>2</sup>	Never heard of condoms	2/29 (6.9)	5.1 (0.0, 12.7)
	Don't know how to obtain a condom	0/29 (0.0)	-
	I didn't think it was necessary	7/29 (24.1)	20.8 (5.7, 35.6)
	I didn't think of it	2/29 (6.9)	7.5 (0.0, 18.9)
	Not available	9/29 (31.0)	27.2 (10.5, 43.9)
	Too expensive	0/29 (0.0)	-
	Partner objected	13/29 (44.8)	56.0 (36.9, 75.2)
	Don't like them	5/29 (17.2)	23.9 (5.5, 42.3)
HIV status of the last casual partner	Condoms takes away pleasure	6/29 (20.7)	27.1 (9.0, 45.4)
	HIV-negative	147/229 (64.2)	64.4 (57.6, 71.1)
	HIV-positive	1/229 (0.4)	0.1 (0, 0.2)
	I did not know / ask	81/229 (35.4)	35.5 (28.9, 42.3)

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

A majority (93.0%) of TGW in Colombo had a regular male sexual partner in the six months before the survey, and most (50.0%) had met their last regular male sexual partner in a public place, such as in a street, park or in public transport. Among TGW in Colombo who had a regular sexual partner in the past six months, half (52.9%) used a condom consistently during sex, and as many as four in five (79.5%) used a condom at last anal sex with a regular partner. Those who have not used a condom at last anal sex with a regular sexual partner in most cases did so because they believe condoms take away pleasure (43.3%) or because their partner objected (41.2%). Finally, as many as one in three (35.9%) TGW in Colombo did not know or ask their last regular male sexual partner about his HIV status.

**Table 281: Regular Male Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Had a regular <sup>1</sup> male partner in the past 6 months	Yes	233/254 (91.7)	93.0 (89.1, 96.8)
Frequency of condom use in the past 6 months	Every time	117/233 (50.2)	52.9 (45.8, 59.9)
	Almost every time	71/233 (30.5)	27.6 (21.9, 32.2)
	Sometimes	36/233 (15.4)	14.5 (9.2, 20.0)
	Never	9/233 (3.9)	5.0 (1.7, 8.3)
Condom use at last anal sex with a regular partner	Yes	187/231(81.0)	79.5 (73.5, 85.4)
	No	44/231 (19.0)	20.5 (14.6, 26.5)
	Don't remember	2/233 (0.9)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Reasons for not using a condom (multiple answers) <sup>2</sup>	Never heard of condoms	3/44 (6.8)	(5.1 (0.0, 11.1))
	Don't know how to obtain a condom	0/44 (0.0)	-
	I didn't think it was necessary	10/44 (22.7)	(18.5 (7.3, 29.7))
	I didn't think of it	4/44 (9.1)	(11.0 (0.0, 22.9))
	Not available	14/44 (31.8)	(33.3 (17.0, 49.7))
	Too expensive	1/44 (2.3)	(0.9 (0.0, 2.3))
	Partner objected	16/44 (36.4)	(41.2 (24.2, 58.3))
	Don't like them	7/44 (15.9)	(18.0 (5.8, 30.2))
	Condoms takes away pleasure	17/44 (38.6)	(43.4 (27.1, 59.5))
How last regular partner was met <sup>3</sup>	Brothel	3/228 (1.3)	1.6 (0.0, 3.3)
	Bar, café, disco or restaurant	5/228 (2.2)	1.2 (0.0, 2.5)
	Hotel	13/228 (5.7)	7.9 (3.3, 12.5)
	Street, park or public transport	113/228 (49.6)	50.0 (42.8, 57.2)
	Through friends	35/228 (15.4)	15.8 (10.4, 21.2)
	Internet (e.g. Facebook), chat, or SMS	26/228 (11.4)	10.6 (5.9, 15.5)
	Motel or Guest House	23/228 (10.1)	9.2 (4.8, 13.6)
	School	0/228 (0.0)	-
	Party	0/228 (0.0)	-
	Intermediary	4/228 (1.8)	1.9 (0.2, 3.5)
	Service station	5/228 (2.2)	1.5 (0.6, 2.4)
	Truck stop	0/228 (0.0)	-
	Massage Parlour / Spa	0/228 (0.0)	-
	Somewhere else	1/228 (0.4)	0.3 (0.0, 0.9)
HIV status of the last regular partner	HIV-negative	148/233 (63.5)	64.1 (57.7, 70.5)
	HIV-positive	0/233 (0.0)	-
	I did not know / ask	85/233 (36.5)	35.9 (29.5, 42.3)

<sup>1</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis; <sup>2</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses. <sup>3</sup> Due to using two different version of the ODK during survey implementation, five respondents did not provide an answer to this question;

Very few TGW in Colombo have had a female sexual partner in the year before the survey (5.0%).

**Table 282: Female Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Had a female sexual partner in the past 12 months <sup>1</sup>	Among all	16/254 (6.3)	5.0 (2.4, 7.6)
	Among those who ever had vaginal sex with a woman	16/22 (72.7)	(70.5 (53.1, 87.6)) <sup>1</sup>
Frequency of condom use with female sexual	Every time	2/16 (12.5)	-
	Almost every time	8/16 (50.0)	-
	Sometimes	5/16 (31.3)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
partners in the past 12 months <sup>1</sup>	Never	1/16 (6.3)	-
Condom use at last sex with a female partner <sup>1</sup>	Yes	9/16 (56.2)	-
HIV status of the last female partner <sup>1</sup>	HIV-negative	14/16 (87.5)	-
	HIV-positive	0/16 (0.0)	-
	I did not know / ask	2/16 (12.5)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

For a majority of TGW in Colombo, their last sexual partner was a man (95.8%) and at last sexual intercourse or anal sex, four in five TGW women in Colombo used a condom (82.3%).

**Table 283: Last Sexual Partner**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sex of last sexual partner	Women	20/254 (7.9)	4.2 (1.8, 6.7)
	Man	234/254 (92.1)	95.8 (93.3, 98.2)
Condom use at last sexual intercourse or anal sex	Yes	209/254 (82.3)	82.3 (77.3, 87.2)

### Use of Condoms and Lubricants

Very few (1.72%) TGW in Colombo have never heard of condoms. Among those who have, most (98.2%) also know where to obtain condoms. Specifically, TGW in Colombo most often obtain condoms from private pharmacies or chemists (70.0%) or NGOs and outreach services (47.2%), neighbourhood markets and stands (43.2%) and government STD clinics (42.0%). About half of the TGW in Colombo find condoms to be affordable (51.0%). Four in five TGW in Colombo (82.7%) have ever heard of lubricants and among them, more than half use lubricants always or usually (53.3 and 11.9%, respectively). Most, however, as lubricant use glycerine (38.1%) or baby oil (27.2%).

**Table 284: Use of condoms and lubricants**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of condoms	Yes	249/254 (98.0)	98.8 (97.8, 99.9)
Knows where to obtain condoms	Yes	244/249 (98.0)	98.2 (96.3, 100)
Usually obtains condoms from (multiple response)	Government clinic - STD clinic	107/243 (44.0)	42.0 (34.3, 49.6)
	Govt. clinic - Not STD clinic	8/243 (3.3)	0.9 (0.3, 1.5)
	Private clinic	12/243 (4.9)	3.8 (1.2, 6.4)
	Private pharmacy or chemist	168/243 (69.1)	70.0 (63.2, 76.7)
	Traditional healer/herbalist	2/243 (0.8)	0.4 (0.0, 1.0)
	Neighbourhood market/stand	98/243 (40.3)	43.2 (35.6, 50.8)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Friends	37/243 (15.2)	13.5 (8.6, 18.3)
	Sex partner/s	37/243 (15.2)	15.9 (10.7, 21.2)
	Bar / Nightclub	0/243 (0.0)	-
	NGOs/ outreach service	116/243 (47.7)	47.2 (40.1, 54.3)
	Service station(s)	0/243 (0.0)	-
	I do not use condoms	0/243 (0.0)	-
	Rather not say	1/244 (0.4)	-
Affordability of male condoms	Affordable	122/249 (49.0)	51.0 (43.2, 58.9)
	Somewhat affordable	123/249 (49.4)	47.8 (39.6, 55.8)
	Not affordable	2/249 (0.8)	0.3 (0.0, 0.6)
	Don't know	2/249 (0.8)	1.0 (0.0, 2.5)
Ever heard of lubricants	Yes	209/254 (82.3)	82.7 (77.5, 87.9)
Frequency of lubricant use during vaginal or anal sex	Always	103/209 (49.3)	53.3 (45.9, 60.6)
	Usually	25/209 (11.2)	11.9 (6.8, 16.9)
	Sometimes	62/209 (29.7)	26.5 (19.8, 33.3)
	Rarely	9/209 (4.3)	3.7 (0.8, 6.6)
	Never	8/209 (3.8)	4.2 (1.4, 7.0)
	Don't know	2/209 (0.9)	0.5 (0, 1.2)
Type of lubricant used (multiple response)	Glycerine	79/199 (35.2)	38.1 (30.1, 45.5)
	Saliva or water	30/199 (15.1)	10.6 (5.7, 15.5)
	Vaseline	33/199 (16.6)	14.4 (9.2, 19.6)
	Baby oil	49/199 (24.6)	27.2 (20.1, 34.2)
	Lotion	46/199 (23.1)	23.7 (16.5, 30.1)
	Other oil	17/199 (8.5)	11.4 (5.3, 17.6)
	Water-based	24/199 (12.1)	8.6 (5.1, 12.1)
	Silicone-based	20/199 (10.1)	12.2 (5.7, 18.6)
	Soap	9/199 (4.5)	4.5 (2.6, 11.6)
	Whatever we get from peer educator(s), don't know what it is	14/199 (7.0)	7.1 (2.6, 11.6)

### Sexually Transmitted Infections

About four in five (81.0%) of TGW in Colombo have ever heard of diseases that can be transmitted sexually. With regard to recognizing and describing symptoms of an STI, most of them know that burning pain on urination and genital ulcers or sores (51.4 and 50.3%, respectively, in women and 60.8 and 58.5%, respectively, in men) indicate a possible sexually transmitted infection. Few (6.3%) had a symptom of a sexually transmitted infection (i.e., a discharge or genital ulcer (sore)), although as many as 15.6% did receive an STI diagnosis in the year preceding the survey.

**Table 285: Sexually transmitted infections**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of diseases that can be transmitted sexually	Yes	201/254 (79.1)	81.0 (76.0, 85.9)
Can describe symptoms of sexually transmitted infections in women (multiple response)	1. Abdominal pain	98/201 (48.8)	46.7 (38.9, 54.5)
	2. Abnormal genital discharge	92/201 (45.8)	43.3 (35.7, 51.0)
	3. Burning pain on urination	107/201 (53.2)	51.4 (43.6, 59.1)
	4. Genital ulcers or sores	96/201 (47.8)	50.3 (41.9, 58.7)
	5. Swelling in groin area	64/201 (31.8)	34.8 (26.9, 42.8)
	6. Itching	64/201 (31.8)	31.7 (23.8, 39.5)
	Don't know any	7/201 (3.5)	3.2 (1.8, 5.3)
Symptoms mentioned (0-6)	0	7/201 (3.5)	3.2 (1.8, 5.3)
	1	17/201 (8.5)	8.6 (6.1, 10.1)
	2	67/201 (33.3)	30.1 (22.7, 37.5)
	3	77/201 (38.3)	41.6 (33.4, 49.8)
	4	26/201 (12.9)	2.1 (7.1, 17.0)
	5	7/201 (3.5)	3.5 (3.1, 4.2)
	6	0/201 (0.0)	-
Can describe symptoms of sexually transmitted infections in men (multiple response)	1. Genital discharge	116/201 (57.7)	55.5 (47.7, 63.3)
	2. Burning pain on urination	123/201 (61.2)	60.8 (53.3, 68.3)
	3. Genital ulcers or sores	107/201 (53.2)	58.5 (50.4, 66.6)
	4. Swelling in groin area	96/201 (47.8)	46.1 (38.1, 54.0)
	5. Itching	79/201 (39.3)	37.8 (30.1, 45.5)
	Don't know any	1/201 (0.5)	0.4 (0.0, 0.9)
Symptoms mentioned (0-6)	0	1/201 (0.5)	0.4 (0.0, 0.9)
	1	22/201 (10.9)	10.7 (6.0, 15.4)
	2	57/201 (28.4)	27.3 (20.2, 34.3)
	3	101/201 (50.2)	54.4 (46.5, 62.3)
	4	18/201 (9.0)	8.3 (7.1, 9.4)
	5	2/201 (1.0)	1.0 (0.2, 1.9)
Tested for sexually transmitted diseases in the past 3 months	Yes	93/253 (36.8)	35.0 (28.0, 42.1)
	No	160/253 (63.2)	65.0 (57.9, 72.0)
	Don't know	1/254 (0.4)	-
Received an STI diagnosis in the past 12 months	Yes	31/201 (15.4)	15.6 (9.9, 21.4)
Had a discharge or genital ulcer (sore) in the last 12 months	Yes	14/253 (5.5)	6.3 (3.0, 9.6)
	No	239/253 (94.5)	93.7 (90.4, 97.0)
	Don't know	1/254 (0.4)	-
Sought treatment <sup>1</sup>	Yes	14/14 (100)	-
Places where treatment was sought (multiple response) <sup>1</sup>	Government clinic - STD clinic	13/14 (92.9)	-
	Govt. clinic - Not STD clinic	3/14 (21.4)	-
	Private clinic	2/14 (14.3)	-
	Private pharmacy or chemist	1/14 (7.1)	-
	Traditional healer/herbalist	0/14 (0.0)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	I used medicine or herbs from home	0/14 (0.0)	-
Reasons for seeking treatment from that source (multiple response) <sup>1</sup>	Confidentiality	14/14 (100)	-
	Affordability	0/14 (0.0)	-
	Recommended by friend or acquaintance	0/14 (0.0)	-
	Quality and/or specialized care given at this place	1/14 (7.1)	-
	Knows the caregivers	0/14 (0.0)	-
	Known friendliness of the caregivers	0/14 (0.0)	-
	Proximity/location	0/14 (0.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Prevention Programs

Among TGW in Colombo who had ever tested for HIV, a majority (97.8%) told their counsellor/health care provider that they are a TGW at their last HIV test. In addition, four in five (81.4%) of them were satisfied or very satisfied with the quality of services provided at the place where they received their last HIV test.

**Table 286: Contact with healthcare providers**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
<b>STI treatment</b>			
Told the healthcare provider that they are a TGW woman when the last treatment for any symptom of an STI or a diagnosis for an STI was received <sup>1</sup>		14/14 (100)	-
Satisfaction with how the healthcare provider treated them during this last visit <sup>1</sup>	Very satisfied	9/14 (64.3)	-
	Somewhat satisfied	5/14 (35.7)	-
	Not satisfied	0/14 (0.0)	-
<b>HIV testing</b>			
Told the counsellor/health care provider that they are TGW woman when last HIV test was received	Yes	143/148 (96.6)	97.8 (95.7, 99.9)
	No	5/148 (3.4)	2.2 (0.1, 4.3)
	Don't know	1/149 (0.7)	-
Satisfaction with the quality of services provided at the place where the last HIV test was received	Very satisfied	80/149 (53.7)	51.9 (42.3, 61.3)
	Satisfied	41/149 (27.5)	29.5 (20.2, 39.1)
	A little satisfied	27/149 (18.1)	18.1 (12.4, 23.7)
	Not satisfied	0/149 (0.0)	-
	Don't know	1/149 (0.7)	0.4 (0, 1.3)

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses

In the year preceding the survey, half (52.4%) of TGW in Colombo had sought medical care, with as many as one quarter (27.5%) of them experiencing any difficulty getting medical care when they sought it, in most cases related to long waiting times. Four in five (86.1%) TGW in Colombo received injections that contain feminizing hormones in the past six months. Among them, 7.6% have at least once used a needle that someone else used before. Three in four TGW in Colombo (72.2%) had a gender enhancement or transition procedure and very few (1.5%) have a surgically constructed vagina.

**Table 287: Use of healthcare services**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sought medical care for any reason in the past 12 months	Yes	123/245 (48.4)	52.4 (45.6, 59.1)
Had difficulty getting medical care when they sought it	Yes	33/123 (26.8)	27.5 (18.3, 36.6)
Type of difficulty (multiple response) <sup>1</sup>	Too expensive	2/33 (6.1)	(8.7 (0, 19.6))
	Too far away	1/33 (3.0)	(2.2 (0, 6.1))
	Could not take time from work	4/33 (12.1)	(12.4 (1.2, 23.3)) <sup>1</sup>
	Long waiting times	27/33 (81.8)	(78.5 (64.6, 93.2))
Received injections that contain feminizing hormones in the past 6 months	Yes	208/253 (82.2)	86.1 (81.3, 90.9)
Used a needle that someone else used before to inject hormones in the past 6 months	Yes	17/206 (8.3)	7.4 (4.2, 10.5)
	No	189/206 (91.7)	92.6 (89.5, 95.8)
	Don't know	2/208 (1.0)	-
Had a gender enhancement or transition procedure	Yes	174/253 (68.8)	72.2 (66.2, 78.1)
	No	79/253 (31.2)	27.8 (21.9, 33.8)
	Don't know	1/254 (0.4)	-
Has a surgically constructed vagina	Yes	5/254 (2.0)	1.5 (0.1, 2.8)
	No	247/254 (98.0)	98.3 (96.9, 99.7)
	Don't know	1/254 (0.4)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses

Half of TGW in Colombo have been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the three months preceding the survey (49.0%). Among those who have, most received condoms and lubricants (94.6%), or general HIV/STI prevention/transmission information (92.7%). In addition, one in three (35.0%) TGW in Colombo had tested for an STI in the three months preceding the survey. Coverage by HIV prevention programs, defined as receipt of at least two interventions (i.e., given condoms and lubricant; Counselling on condom use and safe sex; Received an STI test) in the past three months, is somewhat lower, at 44.3%.

**Table 288: Coverage of HIV prevention programs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the past 3 months	Yes	129/254 (50.8)	49.0 (42.2, 55.9)
Services received	General HIV/STI prevention/ transmission information	119/129 (92.2)	92.7 (86.3, 99.2)
	Condoms and lubricants	120/129 (93.0)	94.6 (90.4, 98.9)
	Referral for STI treatment	19/129 (14.7)	10.7 (4.7, 16.6)
	Referral for VCT	11/129 (8.5)	4.1 (1.3, 6.9)
	Counselling on condom use and safe sex	96/129 (74.4)	76.9 (68.6, 85.2)
Tested for sexually transmitted diseases in the past 3 months	Yes	93/253 (36.8)	35.0 (28.0, 42.1)
	No	160/253 (63.2)	65.0 (57.9, 72.0)
	Don't know	1/254 (0.4)	-
3.7 Coverage of HIV prevention programs <sup>1</sup>		114/254 (44.9)	44.3 (37.5, 51.0)

<sup>1</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Tested for sexually transmitted infections in the past three months)

### Experiences of Discrimination and Violence on the basis of being a TGW woman

As many as 8.5% of TGW in Colombo have been refused health care and 7.5% have been refused police assistance on the basis of being a TGW woman. Prevalence of violence is very high, with close to half (49.0%) of TGW in Colombo experiencing verbal harassment, 8.5% experiencing physical violence, and 10.5% experiencing sexual violence.

**Table 289: Experiences of discrimination and violence on the basis of being a TGW woman**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Refused health care	Yes	25/253 (9.8)	8.5 (5.3, 11.5)
	No	228/253 (89.8)	91.5 (88.5, 94.7)
	Don't know	1/254 (0.4)	-
Refused police assistance	Yes	21/253 (8.3)	7.5 (4.3, 10.8)
	No	232/253 (91.7)	92.5 (89.2, 95.7)
	Rather not say	1/254 (0.4)	0.4 (0.0, 0.9)
Verbally insulted	Yes	117/254 (46.1)	49.0 (42.5, 55.5)
	No	137/254 (53.9)	51.0 (44.5, 57.5)
Hit, kicked, or beaten	Yes	22/254 (8.7)	8.5 (5.0, 11.9)
	No	232/254 (91.3)	91.5 (88.1, 95.0)
Sexually assaulted or raped	Yes	28/254 (11.0)	10.5 (6.2, 14.7)
	No	226/254 (89.0)	89.5 (85.3, 93.8)
Sexual assailant/rapist <sup>1</sup>	Stranger	23/28 (82.1)	(93.6 (58.2, 100))

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Social acquaintance	4/28 (14.3)	(6.0 (0.0, 13.1))
	Family/relative	0/28 (0.0)	-
	Police	0/28 (0.0)	-
	Paying sexual partner (Client)	0/28 (0.0)	-
	Non-paying partner or boyfriend/ girlfriend	1/28 (3.6)	(0.4 (0.0, 0.8))
Sought medical treatment for sexual assault/rape <sup>1</sup>	Yes	1/28 (3.6)	(4.7 (0, 13.2))
Reported sexual assault/rape to the police <sup>1</sup>	Yes	1/28 (3.6)	(0.6 (0, 1.6))

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses

### Use of Alcohol and Drugs

Only about one-third of TGW in Colombo have ever had a drink containing alcohol (31.7%), and among those who have, about two in three (69.3%) have a drink containing alcohol at least once a week.

**Table 290: Alcohol consumption**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had a drink containing alcohol	Yes	89/254 (35.0)	31.7 (25.2, 38.3)
Alcohol consumption in the past month	I never drink alcohol	2/88 (2.3)	1.0 (0.0, 2.7)
	At least once a week	47/88 (53.4)	69.3 (57.2, 82.6)
	Less than once a week	24/88 (27.3)	18.4 (9.4, 26.8)
	Never in the past month	12/88 (13.6)	8.1 (1.0, 14.8)
	Every day	0/88 (0.0)	-
	Don't know	3/88 (3.4)	3.1 (0.0, 7.1)
	Rather not say	1/89 (1.1)	-

Drug use is very low among TGW in Colombo, with very few having ever used any non-prescribed/illicit drugs.

**Table 291: Use of non-prescribed/illicit drugs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of drug used			
Heroin	<i>Frequency of consumption</i>		
	Have never used	245/252 (97.2)	98.3 (97.1, 99.6)
	Never in the past 12 months	1/252 (0.4)	0.2 (0.0, 0.5)
	Monthly or less	0/252 (0.0)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Several times a month Two to four times a month Two to three times a week Four or more times a week Don't know Rather not say	1/252 (0.4) 0/252 (0.0) 0/252 (0.0) 1/252 (0.4) 4/252 (1.6) 2/254 (0.8)	0.2 (0.0, 0.7) - - 0.5 (0.0, 1.5) 0.7 (0.1, 1.4) -
Cannabis	<i>Frequency of consumption</i> Have never used Never in the past 12 months Monthly or less Several times a month Two to four times a month Two to three times a week Four or more times a week Don't know Rather not say	243/251 (96.8) 1/251 (0.4) 0/251 (0.0) 1/251 (0.4) 0/251 (0.0) 0/251 (0.0) 0/251 (0.0) 3/251 (1.2) 3/251 (1.2) 3/254 (1.2)	98.5 (97.4, 99.6) 0.2 (0.0, 0.5) - 0.2 (0.0, 0.7) - - - 0.8 (0.0, 1.7) 0.3 (0.1, 0.6) -
Cocaine	<i>Frequency of consumption</i> Have never used Never in the past 12 months Monthly or less Several times a month Two to four times a month Two to three times a week Four or more times a week Don't know Rather not say	250/252 (99.2) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 2/252 (0.8) 2/254 (0.8)	99.8 (99.5, 100) - - - - - - - 72.6 (0.0, 0.5) -
Ecstasy	<i>Frequency of consumption</i> Have never used Never in the past 12 months Monthly or less Several times a month Two to four times a month Two to three times a week Four or more times a week Don't know Rather not say	249/252 (98.8) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 1/252 (0.4) 2/252 (0.8) 2/254 (0.8)	99.4 (98.8, 100.0) - - - - - - 0.4 (0.0, 0.9) 0.2 (0.0, 0.5) -
Amphetamines	<i>Frequency of consumption</i> Have never used Never in the past 12 months Monthly or less Several times a month Two to four times a month Two to three times a week Four or more times a week	248/253 (98.0) 0/253 (0.0) 0/253 (0.0) 0/253 (0.0) 0/253 (0.0) 0/253 (0.0) 0/253 (0.0) 0/253 (0.0)	99.1 (98.4, 99.8) - - - - - - -

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Don't know	5/253 (2.0)	0.9 (0.2, 1.6)
	Rather not say	1/254 (0.4)	-
Opium	<i>Frequency of consumption</i>		
	Have never used	247/252 (98.0)	99.2 (98.5, 99.9)
	Never in the past 12 months	0/252 (0.0)	-
	Monthly or less	0/252 (0.0)	-
	Several times a month	0/252 (0.0)	-
	Two to four times a month	0/252 (0.0)	-
	Two to three times a week	0/252 (0.0)	-
	Four or more times a week	0/252 (0.0)	-
	Don't know	5/252 (2.0)	0.8 (0.1, 1.5)
Rather not say	2/254 (0.8)	-	
Hashish	<i>Frequency of consumption</i>		
	Have never used	248/253 (98.0)	99.2 (98.5, 99.9)
	Never in the past 12 months	0/253 (0.0)	-
	Monthly or less	0/253 (0.0)	-
	Several times a month	0/253 (0.0)	-
	Two to four times a month	0/253 (0.0)	-
	Two to three times a week	0/253 (0.0)	-
	Four or more times a week	0/253 (0.0)	-
	Don't know	5/253 (2.0)	0.8 (0.1, 1.5)
Rather not say	1/254 (0.4)	-	
Other drugs	<i>Frequency of consumption</i>		
	Have never used	241/252 (95.6)	98.3 (97.3, 99.3)
	Never in the past 12 months	2/252 (0.8)	0.3 (0.0, 0.6)
	Monthly or less	2/252 (0.8)	0.5 (0.0, 1.1)
	Several times a month	1/252 (0.4)	0.2 (0.0, 0.4)
	Two to four times a month	0/252 (0.0)	-
	Two to three times a week	2/252 (0.8)	0.4 (0.0, 0.9)
	Four or more times a week	0/252 (0.0)	-
	Don't know	4/252 (1.6)	0.4 (0.1, 0.6)
Rather not say	2/254 (0.8)	-	

Very few TGW in Colombo have ever injected drugs (0.3%), and among those who have, none have injected drugs in the year before the survey.

**Table 292: Use of non-prescribed/illicit drugs by injection**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever injected drugs for non-medical purposes	Yes	4/244 (1.6)	0.3 (0.0, 0.6)
	No	240/244 (98.4)	99.7 (99.4, 100)
	Don't know	9/254 (3.5)	-
	Rather not say	1/254 (0.4)	-
Ever used non-sterile injecting equipment when injecting drugs	Yes	1/4 (75.0)	-
Safe injecting practice <sup>2</sup>	Yes	0/4 (0.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses. <sup>2</sup> % Used a sterile needle and syringe at last injection

**Table 293: Use of non-prescribed/illicit drugs by injection in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Injected drugs for non-medical purposes in the past 12 months	Yes	0/4 (0.0)	-

### Use of Media

Regarding media use, TGW in Colombo most frequently watch TV (most days or every day: 94.8%) or listen to the radio (most days or every day: 90.7%). Much fewer ever read the newspaper (47.5%). Four in five TGW in Colombo ever use the Internet (85.0%) and about half at least sometimes use the Internet to find sexual partners (55.3%). Finally, almost all (98.3%) TGW in Colombo have a mobile phone.

**Table 294: Use of media in the past 30 days**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Radio	Never	16/253 (6.3)	5.1 (2.5, 7.7)
	Once a month	4/253 (1.6)	2.2 (0.1, 4.3)
	Once a week	5/253 (2.0)	1.7 (0.0, 3.6)
	Most days	174/253 (68.8)	68.7 (61.7, 75.7)
	Every day	53/253 (20.9)	22.0 (15.3, 28.7)
	Don't know	1/253 (0.4)	0.3 (0.0, 0.7)
	Rather not say	1/254 (0.4)	-
TV	Never	7/254 (2.8)	1.4 (0.4, 2.5)
	Once a month	3/254 (1.2)	1.4 (0.0, 3.0)
	Once a week	7/254 (2.8)	2.1 (0.1, 4.0)
	Most days	149/254 (58.7)	57.8 (50.9, 64.8)
	Every day	87/254 (34.3)	37.0 (30.0, 44.0)
	Don't know	1/254 (0.4)	0.3 (0.0, 0.8)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Newspaper	Never	127/254 (50.0)	52.5 (45.6, 59.4)
	Once a month	7/254 (2.8)	2.1 (0.5, 3.8)
	Once a week	65/254 (25.6)	27.2 (21.2, 33.2)
	Most days	40/254 (15.7)	12.0 (8.1, 15.9)
	Every day	14/254 (5.5)	5.8 (1.8, 9.9)
	Don't know	1/254 (0.4)	0.3 (0.0, 0.7)
Internet	Never	46/254 (18.1)	15.0 (10.5, 19.5)
	Once a month	10/254 (3.9)	4.1 (1.5, 6.7)
	Once a week	13/254 (5.1)	4.9 (2.3, 7.7)
	Most days	104/254 (40.9)	42.3 (35.2, 49.3)
	Every day	80/254 (31.5)	33.4 (26.4, 40.4)
	Don't know	1/254 (0.4)	0.3 (0.0, 0.8)
Uses Internet to find sexual partners	Never	118/253 (46.6)	44.7 (37.8, 51.7)
	Once a month	17/253 (6.7)	8.1 (3.8, 12.3)
	Once a week	13/253 (5.1)	6.1 (2.2, 10.0)
	Most days	97/253 (38.3)	37.9 (30.6, 45.3)
	Every day	7/253 (2.8)	2.9 (0.5, 5.2)
	Don't know	1/253 (0.4)	0.3 (0.0, 0.7)
	Rather not say	1/254 (0.4)	-
Has a mobile phone	Yes	248/254 (97.6)	98.3 (96.6, 100)

### Multiplier questions

In May, June or July of 2017, 60.3% of TGW in Colombo received any services (educational leaflets, condoms, HIV counselling) from the NGO Heart to Heart. Somewhat fewer (51.8%) received condoms from the same NGO and 25.5% were escorted by NGO Heart to Heart's staff to an STI clinic. About one in five TGW in Colombo (16.7%) received a purse by peer educators during their outreach work in October/November 2017.

**Table 295: Multiplier questions**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Received any services (educational leaflets, condoms, HIV counselling) from the NGO Heart to Heart in Colombo in May, June or July 2017	Yes	162/254 (63.8)	60.3 (53.3, 67.2)
Received condoms from the NGO Heart to Heart in Colombo in May, June or July 2017	Yes	138/254 (54.3)	51.8 (44.8, 58.9)
Escorted to an STI clinic by the staff of the NGO Heart to Heart in Colombo in May, June or July 2017?	Yes	74/254 (29.1)	25.5 (18.8, 32.1)
Received a purse by peer educators (staff of the NGO Heart to Heart in Colombo) in the	Yes	64/254 (25.2)	16.7 (12.2, 21.1)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
week of 28 October-2 November 2017 during their outreach work			
Participated in the first IBBS in Sri Lanka in 2014 <sup>1</sup>	Yes	17/234 (7.3)	7.0 (3.1, 11.0)
	No	217/234 (92.7)	92.9 (89.1, 96.8)
	Don't know	5/239 (2.0)	2.0 (1.5, 3.8)
	In Colombo	0/17 (0.0)	-
	In Galle	17/17 (100)	-
	In Anuradhapura	0/17 (0.0)	-

<sup>1</sup> Question added after fieldwork had started (15 respondents did not provide an answer)

### 3.5.2. Jaffna

A total of 252 TGW respondents were recruited in Jaffna, including 2 seeds. Gile's SS with population size estimate of 705 (low estimate = 88<sup>19</sup>; high estimate = 1,322<sup>20</sup>), 0.95 confidence interval, and 5,000 bootstraps was used. Across the tables presented below, because estimates based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

#### Homophily and Convergence

As previously mentioned, a homophily value of one means no homophily, while values above show the presence of positive homophily (e.g. people are recruiting similar to themselves), and values below 1 mean negative homophily (e.g. people are recruiting different from themselves). In the TGW Jaffna sample, the homophily ranged from 0.74 to 1.03, overall this can be interpreted as weak homophily. Five out of seven key indicators start to converge and population estimates show stability around the 150<sup>th</sup> participant. The remaining two indicators, income and coverage of HIV prevention programmes, show a tendency of converging nearing the end of sampling, around the 250<sup>th</sup> participant.

**Table 296: Homophily analysis**

	<i>Target indicator</i>	<i>Recruitment homophily</i>	<i>Estimated population homophily</i>
1	HIV prevalence among TGW (% HIV positive) <sup>1</sup>	-	-
2	Active syphilis among TGW <sup>2</sup>	-	-
3	Viral hepatitis among TGW (HBV) <sup>1</sup>	-	-
4	HIV and hepatitis co-infection among TGW <sup>1</sup>	-	-
5	Knowledge of HIV status among TGW <sup>3</sup> (% Know HIV status from an HIV test)	(0.97)	-
6	Coverage of HIV prevention programs among TGW <sup>4</sup> (% Reached with HIV/AIDS prevention programs)	(1.03)	-
7	3.6 Condom use among TGW (% Used a condom the last time they had sexual intercourse or anal sex)	0.99	0.98
8	Discriminatory attitudes towards PLHIV <sup>5</sup> (% who answer 'No' to at least one of the two questions)	1.03	0.99
9	Avoidance of HIV services because of stigma and discrimination among TGW (% who answer 'Yes' to at least one of the reasons) <sup>6</sup>	1.06	0.76

<sup>19</sup> UNAIDS estimated the size of transgender people in Asia and Pacific region as 0.02% [2016]. Data are based on a literature review conducted by UNAIDS, GFATM, and WHO with assistance from other agencies. Other findings from the review were published in PLoS One (2016; 11(5): e0155150.) Data reflect population size estimates conducted between 2010 and 2015 in low and middle-income countries. The data are consistent with findings from similar exercises published in 2006 in Sexually Transmitted Infections (2006 Jun; 82(Suppl 3).) Using census data, the low estimate was calculated as 0.02% of the Sri Lankan population aged 15+ years.

<sup>20</sup> UNDP estimated transgender people in Asia-Pacific region as 0.30% [2012]. This figure broadly matches community estimates for numbers of trans\* women in countries such as India, Thailand and Malaysia, which gravitate around a prevalence rate of 1:300, a figure that matches very closely one offered by Gates (2011) for persons in the US who identify as trans\*. Using census data, the high estimate was calculated as 0.30% of the Sri Lankan population aged 15+ years.

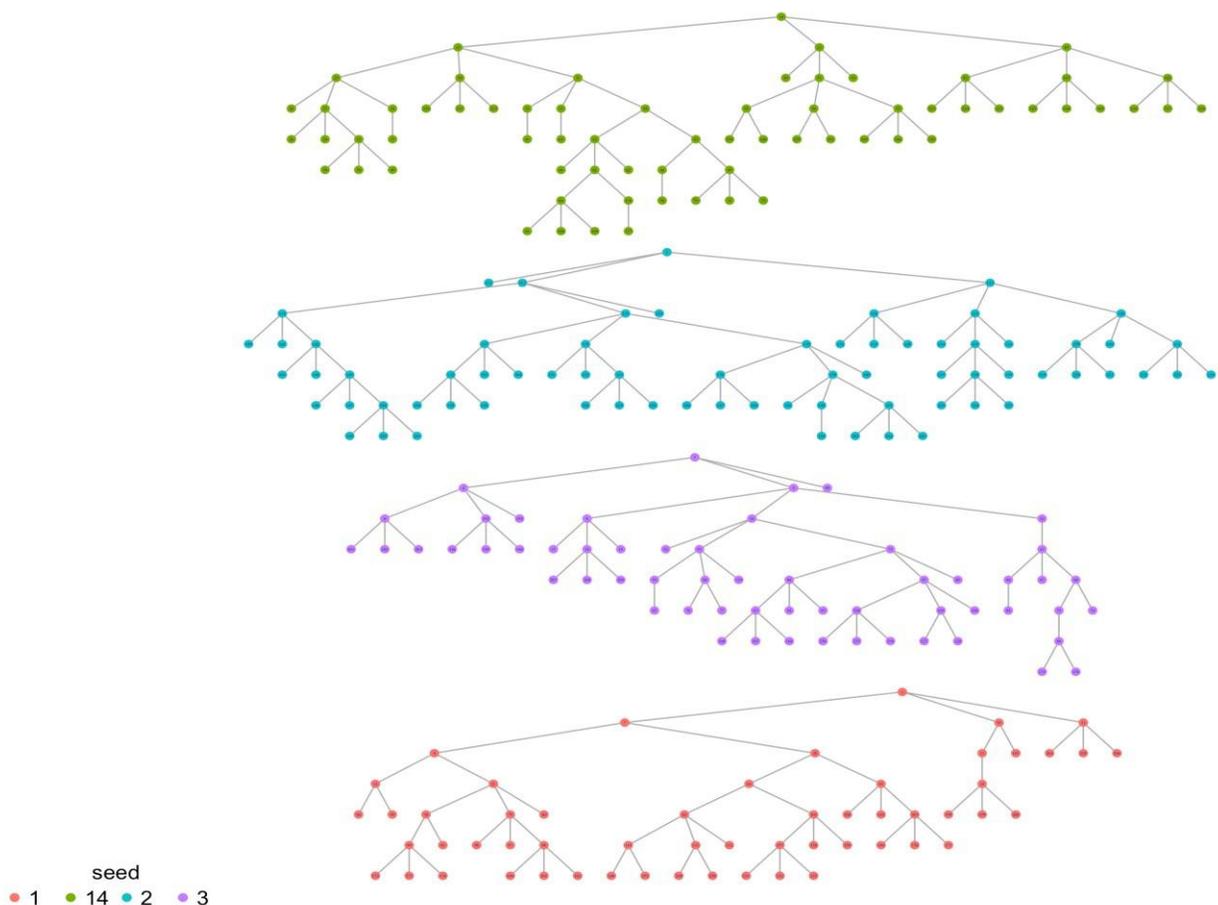
	<i>Target indicator</i>	<i>Recruitment homophily</i>	<i>Estimated population homophily</i>
10	Age (% Mdn+)	0.99	1.00
11	Income (% 20,000 Rs.+)	(0.98)	-

<sup>1</sup> Not calculated because there were not any positive cases. <sup>2</sup> Not calculated because there was one positive case. <sup>3</sup> Tested and positive or tested in the past 12 months and negative. <sup>4</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Tested for STI). <sup>5</sup> Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?; Do you think that children living with HIV should be able to attend school with children who are HIV negative? <sup>6</sup> Did not seek HIV testing/prevention/treatment services because of: Fear of or concern about stigma by staff or neighbours; Fear of or concern about or experienced violence; Fear of or concern about or experienced police harassment or arrest. This Global AIDS Monitoring indicator has changed. Please see Global AIDS Monitoring 2018, pg. 96.

## Recruitment

Recruitment started with four initial respondents (seeds), among which all were almost equally productive, accounting for 22.2%, 23.0%, 26.6, % and 28.2% of the sample, respectively.

**Figure 22. Recruitment tree – TGW Jaffna**



**Table 297: Recruitment information**

Characteristic	Responses	Sample proportion n/N (%)
Main reason for participation	Interest in HIV and sexual health	121/252 (48.0)
	HIV test	39/252 (15.5)
	Interest in issues related to TG people	60/252 (23.8)
	Helping the community	6/252 (2.4)
	Friend wanted me to participate	26/252 (10.3)
	Someone forced me	-
	Incentive/Gift	-
Mode of receiving the coupon	Received the coupon from a friend/ acquaintance	247/252 (98.0)
	Found the coupon laying around somewhere	1/252 (0.4)
	Bought or exchanged it for something	0/252 (0.0)
	Seed (from the IBBS office)	4/252 (1.6)
Acquaintances for:	< 6 months	35/246 (14.2)
	6 months – 1 year	65/246 (26.4)
	> 1 year	146/246 (59.3)
	Rather not say	1/247 (0.4)
Screener's confidence that participant is TGW	Confident	241/252 (95.6)
	Somewhat confident	11/252 (4.4)

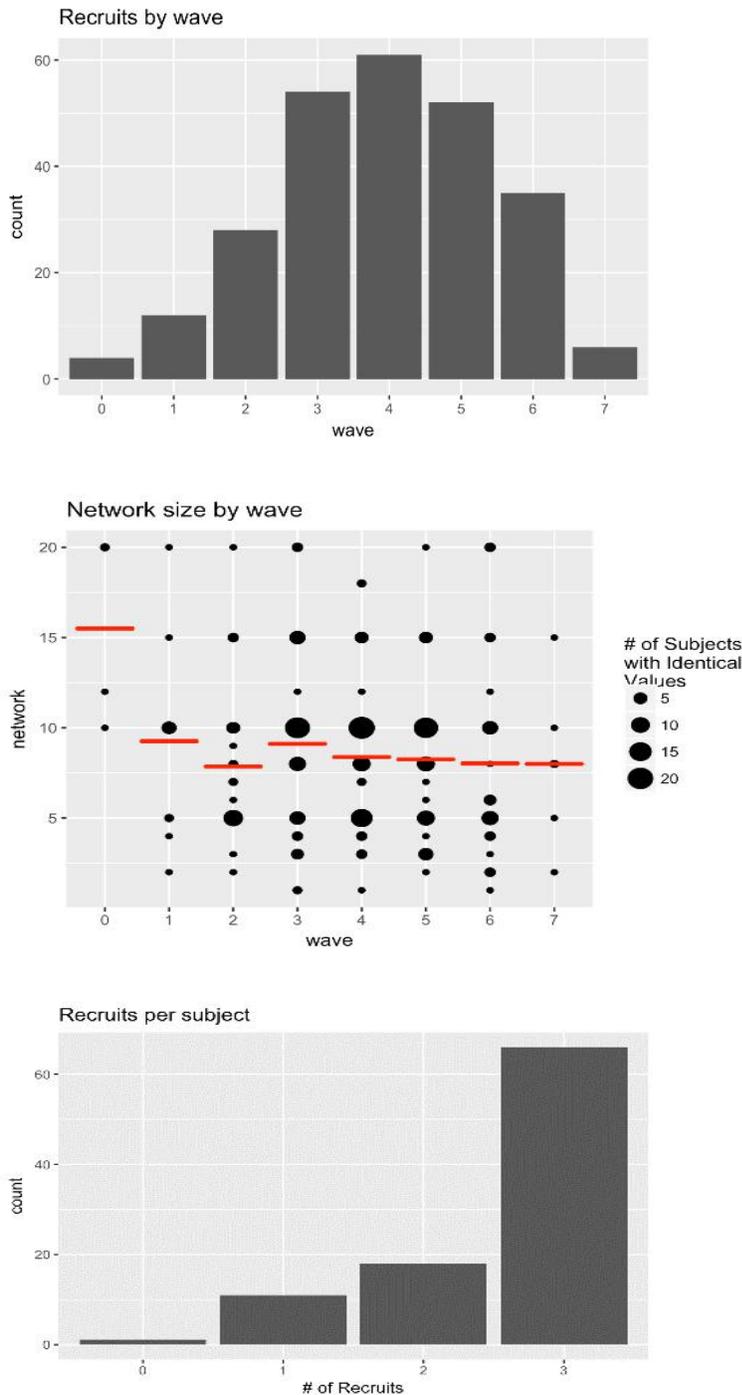
On average, study participants knew about fifteen other TGW. When asked how many of the TGW they knew who were at least 18 years of age, who lived in Jaffna, and who they had seen in the past one month, on average, study participants knew nine other TGW.

**Table 298: Network size questions**

Characteristic	Sample statistics
How many people do you know (they know your name and you know theirs) who were assigned to be a male at birth but who self-identify as a woman and have penetrative sex with men (transwomen)?	$M (SD) = 14.8 (8.07)$ Mdn = 15 Range = 2 – 50
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many are above the age of 18? <sup>1</sup>	$M (SD) = 13.8 (7.59)$ Mdn = 12 Range = 1 – 50
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many live, work or study in Jaffna? <sup>1</sup>	$M (SD) = 10.5 (5.71)$ Mdn = 10 Range = 1 – 30
Of these ___ [number in the previous question] people that you mentioned in the answer to the previous question, how many have you seen in the past 1 month? <sup>2,3</sup>	$M (SD) = 8.5 (4.38)$ Mdn = 8 Range = 1 – 20

<sup>1</sup> One respondent answered with zero. Her answer for this question was changed to 1. <sup>2</sup> Three respondents answered with zero. Their answers for this question were changed to 1. <sup>3</sup> In the estimation of population frequencies and statistics, this question was used as the network size question.

**Figure 23. Recruitment diagnostics – TGW Jaffna**



A total of seven waves were reached among TGW in Jaffna, with the majority of respondents recruited in waves three, four, and five (21.4%, 24.2%, and 20.6%, respectively). As it is expected, the mean network size is lower in subsequent waves, ranging from 16 (Mdn = 16) in wave zero to nine and eight in all other waves. Overall, recruitment in Jaffna went well, with a majority of study participants recruiting into the study three other TGW.

## Biological Indicators

Prevalence of HIV amongst TGW in Jaffna is 0%, however one participant did test positive for syphilis (0.4%), through rapid diagnostic test and TPPA. No positivity for Hepatitis B is present.

**Table 299: Biological test results**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Positive for HIV		0/252 (0.0)	-
Positive for syphilis (VDRL)		0/252 (0.0)	-
Positive for syphilis (TPPA)		1/252 (0.4)	0.4 (0.0, 1.1)
Positive for syphilis (onsite testing)		1/252 (0.4)	0.4 (0.0, 1.1)
Positive for hepatitis B surface antigen		0/252 (0.0)	-
HIV and hepatitis co-infection		0/252 (0.0)	-

## Socio-Demographic Characteristics

All TG women in Jaffna were born in Sri Lanka, have Sri Lankan citizenship and most (99.0%) have lived in Jaffna in the year prior to the survey. Primary residence for a majority of them is also Jaffna (90.5%).

**Table 300: Citizenship and Residence**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Citizenship	Sri Lankan	252/252 (100)	-
Country of birth	Sri Lanka	252/252 (100)	-
District of residence in the past year	Jaffna Other <sup>1</sup>	250/252 (99.2) 2/252 (0.8)	99.0 (97.9, 100) 1.0 (0, 2.0)
Primary residence is Jaffna	Yes	228/252 (90.5)	90.5 (86.3, 94.7)

<sup>1</sup> Colombo 2/2

Mean age of TGW in Jaffna is 27 years, with close to half (45.7%) younger than 24 years of age. With regard to ethnicity and language spoken at home, almost all (99.3 and 99.2%, respectively) of TGW women in Jaffna are Sri Lankan Tamil. Almost all TGW in Jaffna can read and write (93.5%) and very few have never attended formal education (0.3%). Two in three TGW in Jaffna are in paid work (62.0%) and another third of them work occasionally (20.2%). The majority of TGW women in Jaffna earn less than 30,000 Sri Lankan Rupees per month (194 USD).

**Table 301: Core socio-demographic indicators**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Age	Sample <i>M (SD)</i> = 27.7 (8.21) Mdn = 26.0	Pop. est. <i>M (SD)</i> = 27.3 (8.01) Mdn = 25.0	-	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	N = 252 Range = 18 - 74	- -	
Age groups	18 – 24 25 – 34 35 – 44 ≥ 45	107/252 (42.5) 99/252 (39.3) 32/252 (12.7) 14/252 (5.6)	45.7 (39.2, 52.3) 37.5 (31.4, 43.6) 12.2 (8.3, 16.1) 4.6 (2.6, 6.5)
Sex	Transwoman Woman Trans-sexual Nachchi	244/252 (96.8) 0/252 (0.0) 7/252 (2.8) 1/252 (0.4)	96.5 (94.1, 98.9) - 3.2 (0.8, 5.5) 0.4 (0.0, 0.9)
Sex same as at birth	Yes	252/252 (100)	-
Ethnicity	Sinhalese Sri Lankan Tamil Indian Tamil Moor/Muslim Burgher Malay Other	0/252 (0.0) 250/252 (99.2) 2/252 (0.8) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0)	- 99.3 (98.6, 99.9) 0.7 (0.0, 1.4) - - - -
Languages spoken at home (multiple response)	Sinhalese Tamil English Other	4/252 (1.6) 250/252 (99.2) 2/252 (0.8) 0/252 (0.0)	1.4 (0.4, 2.4) 99.2 (98.5, 100) 0.5 (0.0, 1.1) -
Can read and write	Yes	243/251 (96.8)	93.5 (88.8, 98.4)
Completed level of education	Never attended school Grade 1-5 Grade 6-10 Passed O/L Passed A/L Completed Diploma Completed Degree	1/252 (0.4) 4/252 (1.6) 44/252 (17.5) 154/252 (61.1) 47/252 (18.7) 2/252 (0.8) 0/252 (0.0)	0.3 (0.0, 0.6) 1.3 (0.2, 2.3) 15.1 (11.4, 18.8) 65.0 (58.9, 71.0) 17.9 (12.5, 23.4) 0.5 (0.0, 0.9) -
Main activity	In paid work (including parental or other leave) Occasional work In unpaid or voluntary work Unemployed Student Retired Other	164/252 (65.1) 48/252 (19.0) 2/252 (0.8) 34/252 (13.5) 4/252 (1.6) 0/252 (0.0) 0/252 (0.0)	62.0 (55.1, 68.8) 20.2 (14.3, 26.2) 0.7 (0.0, 1.4) 15.7 (10.6, 20.8) 1.4 (0.2, 2.5) - -
Income	< 5,000 Rupees 5,000-10,000 10,001-20,000 20,001-30,000 30,001-40,000	22/245 (9.0) 62/245 (25.3) 81/245 (33.1) 53/245 (21.6) 26/245 (10.6)	9.6 (5.7, 13.5) 24.2 (18.9, 29.6) 33.1 (26.5, 39.6) 22.4 (17.1, 27.7) 9.6 (6.4, 12.9)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	> 40,000 Rupees	1/245 (0.4)	1.1 (0.0, 2.6)
	Don't know	4/252 (1.6)	-
	Rather not say	3/252 (1.2)	-

About one-third of TGW in Jaffna live in their parents' home (34.9%). Many also live in a boarding house (30.4%) or in their own home (25.6%). On average, TGW in Jaffna live with three other people, and about one in five (20.2%) share their household with at least one child. Very few TGW in Jaffna are a parent or a guardian of a child (1.3%). Finally, the majority of TGW in Jaffna are currently in a relationship (86.3%). In most cases, their partner is a man (99.5%).

**Table 302: Household information and family life**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of residence	Temporary shelter	20/252 (7.9)	6.0 (3.8, 8.1)
	Boarding house	80/252 (31.7)	30.4 (24.6, 36.3)
	Parents' home	85/252 (33.7)	34.9 (28.7, 41.2)
	My own home	59/252 (23.4)	25.6 (19.6, 31.5)
	Lodging	8/252 (3.2)	3.0 (0.9, 5.2)
	On the street	0/252 (0.0)	-
	Brothel	0/252 (0.0)	-
	Other	0/252 (0.0)	-
Number of household members	Sample <i>M (SD)</i> = 4.0 (1.61) Mdn = 4.0 <i>N</i> = 248 Range = 1 – 8	Pop. est. <i>M (SD)</i> = 4.0 (1.53) Mdn = 4.0 - -	-
Number of children currently living in the household	No children	202/249 (81.1)	79.8 (73.3, 86.2)
	One	26/249 (10.4)	11.8 (6.2, 17.4)
	Two	18/249 (7.2)	7.7 (4.6, 10.8)
	Three or more	3/249 (1.2)	0.8 (0.1, 1.5)
	Rather not say	3/252 (1.2)	-
Number of children	No children	244/248 (98.4)	98.7 (97.8, 99.7)
	One	1/248 (0.4)	0.3 (0.0, 0.6)
	Two	3/248 (1.2)	1.0 (0.1, 1.9)
	Three or more	0/248 (0.0)	-
	Don't know	1/252 (0.4)	-
	Rather not say	3/252 (1.2)	-
Marital status	Single (Never married)	229/250 (91.6)	90.6 (86.8, 94.3)
	Married	0/250 (0.0)	-
	Divorced/Separated	19/250 (7.6)	8.7 (5.0, 12.5)
	Widowed	2/250 (0.8)	0.7 (0.0, 1.3)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Rather not say	2/252 (0.8)	-
Cohabitation	Living together with a partner/ spouse	57/247 (23.1)	25.6 (19.0, 32.1)
	Involved in a relationship without living together	158/247 (64.0)	60.7 (54.5, 66.9)
	Have no relationship/Do not have a partner	32/247 (13.0)	13.8 (9.9, 17.7)
	Rather not say	5/252 (2.0)	-
Sex of partner	Woman	1/214 (0.5)	0.5 (0.0, 1.1)
	Man	213/214 (99.5)	99.5 (98.9, 100)
	Rather not say	1/215 (0.5)	-

### HIV/AIDS

About one in five TGW in Jaffna have never heard of HIV/AIDS (17.6%). Among those who have, close to half (43.7%) have received the most thorough information about HIV/AIDS from NGOs. Among TGW in Jaffna who have heard of HIV/AIDS, close to half (47.0%) have never discussed HIV/AIDS with any of their partners. Finally, very few (0.6%) TGW in Jaffna know somebody who is HIV-positive or has died of AIDS.

**Table 303: General knowledge about HIV/AIDS**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has heard of HIV/AIDS	Yes	204/252 (81.0)	82.4 (78.0, 87.0)
Main source of the most thorough understanding of HIV/AIDS	School	5/204 (2.5)	5.2 (0.0, 10.6)
	Health services	18/204 (8.8)	8.0 (4.0, 11.9)
	Workplace	8/204 (3.9)	3.6 (1.1, 6.2)
	Friends/Family	19/204 (9.3)	7.0 (4.3, 9.7)
	Television	10/204 (4.9)	5.0 (2.2, 7.8)
	Newspaper/Magazines	17/204 (8.3)	8.0 (4.6, 11.4)
	Posters/Billboards	21/204 (10.3)	11.6 (5.5, 17.7)
	Pamphlets/Leaflets	11/204 (5.4)	6.6 (2.8, 10.4)
	Radio	3/204 (1.5)	1.2 (0.0, 2.4)
	NGOs	92/204 (45.1)	43.7 (35.8, 51.7)
Discussed HIV with any sexual partner	Yes, all	28/202 (13.9)	12.9 (7.4, 18.2)
	Yes, some	81/202 (40.1)	37.8 (30.3, 45.1)
	No, none	87/202 (43.1)	47.0 (39.4, 55.2)
	Don't know	6/202 (3.0)	2.3 (0.6, 3.8)
	Rather not say	2/204 (1.0)	-
Partner ever disclosed their HIV status	Yes, all	5/107 (4.7)	4.7 (1.9, 7.7)
	Yes, some	67/107 (62.6)	64.4 (54.0, 75.6)
	No, none	32/107 (29.9)	28.4 (17.9, 38.2)
	Don't know	3/107 (2.8)	2.4 (0.0, 5.1)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Rather not say	2/109 (1.8)	-
Knows somebody who is HIV-positive or has died of AIDS	Yes	6/204 (2.9)	2.6 (0.8, 4.5)
Close friend or relative died of AIDS (multiple response)	Yes, close relative	0/202 (0.0)	-
	Yes, close friend	0/202 (0.0)	-
	Yes, close relative and close friend	1/202 (0.5)	0.7 (0.0, 1.9)
	No	188/202 (92.2)	89.0 (83.0, 94.8)
	Don't know	13/202 (6.4)	10.3 (4.6, 16.2)
	Rather not say	2/204 (1.0)	-

About one in four (26.2%) TGW in Jaffna cannot gauge her personal risk of HIV. Among the half (56.5%) who believe their risk is none or low, most think so because they trust their partner (79.4%). Among TGW women in Jaffna who perceive their risk of HIV as moderate or high (17.4%), most believe so because they have had many sexual partners (71.9%).

**Table 304: Perception of personal HIV risk**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Personal HIV risk	No risk	118/249 (47.4)	44.1 (37.8, 50.5)
	Low risk	31/249 (12.4)	12.4 (8.1, 16.8)
	Moderate risk	31/249 (12.4)	11.8 (8.2, 15.4)
	High risk	17/249 (6.8)	5.6 (3.4, 7.8)
	Don't know	52/249 (20.9)	26.2 (19.5, 32.5)
	Rather not say	3/252 (1.2)	-
Reasons for perceiving the risk as moderate or high (multiple response)	Many sexual partners	36/47 (76.6)	71.9 (59.9, 84.1)
	Didn't always use condoms	10/47 (21.3)	24.3 (12.3, 36.4)
	Injected drugs	1/47 (2.1)	1.9 (0.0, 4.4)
	Partner has other partners	21/47 (44.7)	42.3 (29.2, 55.3)
	Rather not say	1/48 (2.1)	-
Reasons for perceiving no or low risk (multiple response)	Trust my partner/s	121/148 (81.8)	79.4 (72.5, 86.4)
	Always use condoms	47/148 (31.8)	34.1 (26.6, 41.8)
	Rather not say	1/148 (0.7)	-

Knowledge about HIV prevention is somewhat low among TGW in Jaffna, with two in three (65.5%) of them being able to correctly identify four or five modes of sexual transmission of HIV and/or reject major misconceptions about transmission of HIV. When looking at specific items that the composite indicator consists of, a majority of TGW in Jaffna know that the risk of getting HIV can be reduced by using a condom every time one has sex (77.3%) and that a person cannot get HIV from mosquito bites (74.8%). Much fewer also know that a person cannot get HIV by sharing food with someone who is infected (28.8%).

**Table 305: GAM 5.1 Knowledge about HIV prevention, disaggregated by age**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Risk of HIV transmission can be reduced by having sex with only one uninfected partner who has no other partners	<u>Among all</u> Yes	188/252 (74.6)	74.5 (69.0, 79.9)
	<u>Among those aged 18 – 24</u> Yes	82/107 (76.6)	76.5 (65.5, 87.5)
Person can reduce the risk of getting HIV by using a condom every time he/she has sex	<u>Among all</u> Yes	187/252 (74.2)	77.3 (72.6, 82.1)
	<u>Among those aged 18 – 24</u> Yes	83/107 (77.6)	81.1 (72.4, 90.7)
Healthy-looking person can have HIV	<u>Among all</u> Yes	170/252 (67.3)	70.4 (64.5, 76.3)
	<u>Among those aged 18 – 24</u> Yes	72/107 (67.3)	69.6 (58.9, 81.0)
Person cannot get HIV from mosquito bites	<u>Among all</u> Yes	182/252 (72.2)	74.8 (70.0, 79.8)
	<u>Among those aged 18 – 24</u> Yes	76/107 (71.0)	74.5 (64.8, 85.1)
Person cannot get HIV by sharing food with someone who is infected	<u>Among all</u> Yes	55/251 (21.9)	28.8 (21.8, 35.9)
	Rather not say	1/252 (0.4)	-
	<u>Among those aged 18 – 24</u> Yes	25/107 (23.4)	30.8 (19.3, 44.2)
Composite indicator for knowledge about HIV prevention (1-5 <sup>1</sup> )	# of correct answers <u>Among all</u>		
	None	50/252 (19.8)	18.1 (13.5, 22.7)
	One	4/252 (1.6)	1.1 (0.3, 2.0)
	Two	6/252 (2.4)	3.5 (0.0, 7.4)
	Three	35/252 (13.9)	11.7 (8.4, 15.0)
	Four	124/252 (49.2)	45.1 (38.1, 52.1)
	Five	33/252 (13.1)	20.4 (13.6, 27.2)
	<u>Among those aged 18-24</u>		
	None	19/107 (17.8)	15.3 (3.6, 26.3)
	One	1/107 (0.9)	0.6 (0.0, 1.4)
	Two	4/107 (3.7)	6.5 (4.7, 9.0)
	Three	16/107 (15.0)	12.4 (6.5, 17.6)
	Four	54/107 (50.5)	44.5 (32.4, 55.0)
Five	13/107 (12.1)	20.8 (9.8, 34.1)	
HIV can be transmitted from mother to her unborn child	Yes	193/251 (76.9)	78.0 (73.3, 82.5)
	No	45/251 (17.9)	17.2 (13.0, 21.5)
	Don't know	13/251 (5.2)	4.8 (2.7, 7.0)
	Rather not say	1/252 (0.4)	-
Ever heard of ART	Yes	174/252 (69.0)	64.3 (57.6, 71.0)
	No	66/252 (26.2)	31.5 (24.8, 38.3)
	Don't know	12/252 (4.8)	4.1 (2.2, 6.1)

<sup>1</sup> Don't know is recorded as incorrect. Numerator for individual and the composite indicator excludes those who have never heard of HIV/AIDS, while all who had a valid answer to the question regarding whether they had ever heard of HIV/AIDS are included in the denominator.

Among TGW in Jaffna who have ever heard of HIV/AIDS, one in three (29.3%) exhibits a discriminatory attitude towards PLHIV, with somewhat more saying that they would not buy fresh vegetables from a shopkeeper or vendor if she knew that this person had HIV (24.4%) than saying that they think children living with HIV should not be able to attend school with children who are HIV negative (19.9%).

**Table 306: GAM 4.1 Discriminatory attitudes towards PLHIV, disaggregated by age**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Thinks that children living with HIV should be able to attend school with children who are HIV negative <sup>1</sup>	<u>Among all</u>		
	Yes	157/189 (83.1)	80.1 (72.6, 87.6)
	No	32/189 (16.9)	19.9 (12.5, 27.4)
	Don't Know/Not sure/It depends	15/204 (7.4)	-
	<u>Among those aged 18-49</u>		
	Yes	157/186 (84.4)	81.4 (73.8, 89.0)
	No	29/186 (15.6)	18.6 (11.0, 26.2)
	Don't know/Not sure/It depends	15/201 (7.5)	-
	<u>Among those aged 25-49 years</u>		
	Yes	91/106 (85.8)	85.6 (77.6, 93.6)
No	15/106 (14.2)	14.4 (6.4, 22.4)	
Don't know/Not sure/It depends	7/113 (6.2)	-	
Would buy fresh vegetables from a shopkeeper or vendor if he/she knew that this person had HIV? <sup>1</sup>	<u>Among all</u>		
	Yes	145/193 (75.1)	75.6 (69.0, 82.3)
	No	48/193 (24.9)	24.4 (17.7, 31.0)
	Don't Know/Not sure/It depends	11/204 (5.4)	-
	<u>Among those aged 18-49</u>		
	Yes	144/190 (75.8)	76.5 (70.0, 83.1)
	No	46/190 (24.2)	23.5 (16.9, 30.0)
	Don't know/Not sure/It depends	11/201 (5.5)	-
	<u>Among those aged 25-49 years</u>		
	Yes	80/107 (74.8)	75.6 (67.7, 83.3)
No	27/107 (25.2)	24.4 (16.7, 32.3)	
Don't know/Not sure/It depends	6/113 (5.3)	-	
Composite indicator for discriminatory attitudes towards PLHIV (1-2 <sup>1</sup> )	Responded 'No' to either of the two questions		
	<u>Among all</u>	59/198 (29.8)	29.3 (22.4, 36.4)
	<u>Among those aged 18-49</u>	56/195 (28.7)	28.3 (21.4, 35.1)
	<u>Among those aged 25-49</u>	30/110 (27.3)	24.7 (16.7, 32.6)

<sup>1</sup> Participants who responded don't know/not sure/it depends and those who refused to answer were excluded from the analysis. Numerator: Number of respondents who respond no to either of the two questions; Denominator: Number of all respondents who have heard of HIV.

Four in five (83.6%) TGW in Jaffna know where to receive an HIV test, with a majority (95.5%) mentioning government STI clinic as a place that they know offers an HIV test. Only one in five (21.4%) TGW in Jaffna have ever gone for an HIV test, and only 11.5% have received an HIV test within 12 months before the survey was carried out. Among those who ever did receive an HIV test, most (85.0%) have received their last HIV test at a government STI clinic.

**Table 307: HIV testing**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Knows where to receive an HIV test	Yes	212/252 (84.1)	83.6 (78.6, 88.6)
Places that offer HIV testing (multiple response)	Government clinic – STI	199/212 (93.9)	95.5 (93.5, 97.5)
	Government clinic – non-STI	8/212 (3.8)	4.6 (1.5, 7.8)
	Private clinic	13/212 (6.1)	5.0 (2.6, 7.3)
	Private pharmacy or chemist	0/212 (0.0)	-
	Traditional healer/herbalist	0/212 (0.0)	-
Knows HIV status from an HIV test	No, I have never been tested	206/252 (81.7)	78.6 (72.0, 85.0)
	Yes, I have been tested	46/252 (18.3)	21.4 (14.9, 28.0)
Last HIV test <sup>1</sup>	< 6 months	12/46 (26.1)	(23.7 (7.2, 39.1))
	6 – 12 months	18/46 (39.1)	(41.2 <sup>2</sup> )
	> 12 Months	16/46 (34.8)	(35.1 (0.0, 88.1))
Result of last HIV test <sup>1</sup>	Negative	43/46 (93.5)	(84.1 (67.2, 98.2))
	Positive	0/46 (0.0)	-
	Indeterminate	0/46 (0.0)	-
	Didn't receive the result	3/46 (6.5)	(15.9 (1.8, 32.8))
Composite indicator for knowledge of HIV status <sup>3</sup> (1-3)	Yes	28/252 (11.1)	11.5 (6.9, 15.9)
Last HIV test was voluntary <sup>1</sup>	Yes	43/46 (93.5)	(96.7 (96.3, 98.2))
Place where last HIV test was received <sup>1</sup>	Government clinic – STI	42/46 (91.3)	(85.0 (74.9, 92.4))
	Government clinic – non-STI	3/46 (6.5)	(12.4 (5.5, 21.8))
	Private clinic	1/46 (2.2)	(2.6 (0.8, 4.5))
	Private pharmacy or chemist	0/46 (0.0)	-
	Traditional healer/herbalist	0/46 (0.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses. <sup>2</sup> 95% confidence interval cannot be calculated. <sup>3</sup> Numerator: Number of respondents who tested HIV-positive or who tested in the past 12 months and the result was negative; Denominator: Number of respondents who provided a valid answer to the question about their knowledge about their HIV status from an HIV test.

Among TGW in Jaffna who have never received an HIV test, a majority said it was because they either believe they are not at risk of HIV (48.2%) or because they do not know where to go (30.9%). Almost half (43.8%) of TGW in Jaffna avoid HIV services because of stigma and discrimination, namely due to fear or concern about stigma by staff or neighbours (29.7%).

**Table 308: Reasons for never receiving an HIV test**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Reasons for never receiving an HIV test (multiple response)	Don't know where to go	76/206 (36.9)	30.9 (25.1, 36.4)
	I always use condoms	11/206 (5.3)	5.4 (2.3, 8.5)
	Not at risk of getting HIV	102/206 (49.5)	48.2 (41.4, 55.1)
	Didn't have time/Too busy	21/206 (10.2)	12.2 (7.6, 16.7)
	I trust my partner	36/206 (17.5)	16.7 (11.7, 21.8)
	Afraid of knowing I may be HIV-positive	6/206 (2.9)	6.2 (0.3, 12.2)
	Lack of confidentiality	18/206 (8.7)	10.6 (6.2, 15.1)
	Inconvenient testing location	15/206 (7.3)	9.6 (5.2, 13.8)
	No money	0/206 (0.0)	-
Never receiving an HIV test because of stigma and discrimination (multiple response)	Fear or concern about stigma by staff or neighbours	70/206 (34.0)	29.7 (23.7, 35.7)
	Fear of or concern about or experienced violence	36/206 (17.5)	17.3 (12.5, 22.3)
	Fear of or concern about or experienced police harassment or arrest	4/206 (1.9)	2.5 (0, 5.3)
Composite indicator for avoidance of HIV services because of stigma and discrimination (1-3)		100/206 (48.5)	43.8 (37.2, 50.7)

### Sexual Behaviour

Few TGW in Jaffna have ever had sex with a woman (3.9%). At first anal sex with a man, TGW in Jaffna were on average 17 years of age. Their first male partner was on average somewhat older, at 25 years of age. Finally, one-third (30.2%) of TGW in Jaffna visit outdoor sites (such as parks, streets, bus stations, etc.) to find partners.

**Table 309: General sexual history**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had sex with a woman (vaginal or anal intercourse)	Yes		10/248 (4.0)	3.9 (1.7, 6.3)
	No		238/248 (96.0)	96.7 (93.7, 98.3)
	Rather not say		4/252 (1.6)	-
Type of sex ever had with men	Only oral sex		0/250 (0.0)	-
	Only anal sex		33/250 (13.2)	15.6 (10.8, 20.3)
	Oral sex and anal sex		217/250 (86.8)	84.4 (79.7, 89.2)
	Rather not say		2/252 (0.8)	-
Age at first anal sex with a man	Sample <i>M (SD)</i> = 17.5 (2.79) Mdn = 17.0	Pop. est. <i>M (SD)</i> = 17.3 (2.60) Mdn = 17.0	-	-

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
	<i>N</i> = 245 Range = 13 - 28	- -		
	< 18		152/245 (62.0)	62.9 (56.8, 69.0)
Age of partner at first anal sex with a man	Sample <i>M</i> ( <i>SD</i> ) = 26.0 (5.44) Mdn = 25.0 <i>N</i> = 215 Range = 15 - 45	Pop. est. <i>M</i> ( <i>SD</i> ) = 25.3 (5.33) Mdn = 25.0 - -	-	-
Visits outdoor sites (such as parks, streets, bus stations, etc.) to find partners	Yes		82/252 (32.5)	30.2 (24.6, 36.1)

In the seven days before the survey, TGW in Jaffna on average had five sexual partners, with only very few not having any sexual partners during this period.

**Table 310: Sexual partners in the past 7 days**

Characteristic	Responses		Sample proportion n/N (%)	Population estimates % (95% CI)
Number of all sexual partners	Sample <i>M</i> ( <i>SD</i> ) = 4.7 (2.37) Mdn = 5.0 <i>N</i> = 252 Range = 0 - 15	Pop. est. <i>M</i> ( <i>SD</i> ) = 4.5 (2.40) Mdn = 5.0 - -	-	-
	0 1 2 or more		3/252 (1.2) 6/252 (2.4) 243/252 (96.4)	1.5 (0.0, 2.9) 3.1 (0.8, 5.3) 95.5 (92.8, 98.1)
Number of casual <sup>1</sup> sexual partners (among those who had at least one sexual partner in the past 7 days)	Sample <i>M</i> ( <i>SD</i> ) = 3.4 (2.04) Mdn = 3.0 <i>N</i> = 249 Range = 0 - 10	Pop. est. <i>M</i> ( <i>SD</i> ) = 3.3 (2.05) Mdn = 3.0 - -		
	0 1 2 or more		7/249 (2.8) 26/249 (10.4) 216/249 (86.7)	4.7 (0.6, 87.8) 12.4 (8.1, 16.7) 82.9 (77.1, 88.7)
Number of regular <sup>2</sup> sexual partners (among those who had at least one sexual partner in the past 7 days)	Sample <i>M</i> ( <i>SD</i> ) = 1.4 (0.88) Mdn = 1.0 <i>N</i> = 249	Pop. est. <i>M</i> ( <i>SD</i> ) = 1.3 (0.86) Mdn = 1.0 -	-	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Range = 0 – 5	-	
	0	24/249 (9.6)	9.7 (5.3, 14.0)
	1	139/249 (55.8)	57.3 (50.8, 63.9)
	2 or more	86/249 (34.5)	33.1 (26.8, 39.2)
Number of female sexual partners (among those who had at least one sexual partner in the past 7 days)	0	9/9 (100)	-
	Rather not say	1/10 (10.0)	-

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis

In the six months preceding the survey, TGW in Jaffna on average had 18 sexual partners, with as many as 96.3% having had five or more sexual partners. With regard to type of relationship, TGW in Jaffna on average had much more casual (16) than regular (two) sexual partners. Finally, at last anal sex with a man, only half (51.3%) of TGW in Jaffna used a condom.

**Table 311: Sexual partners in the past 6 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Number of male sexual partners	Sample <i>M (SD)</i> = 19.5 (12.32) Mdn = 20.0 <i>N</i> = 250 Range = 2 – 65	Pop. est. <i>M (SD)</i> = 18.0 (11.82) Mdn = 15.0 - -	-
	1 – 2	2/250 (0.8)	1.0 (0.0, 2.3)
	3 – 4	6/250 (2.4)	2.7 (1.0, 4.4)
	5 or more	242/250 (96.8)	96.3 (94.2, 98.4)
Number of casual <sup>1</sup> sexual partners	Sample <i>M (SD)</i> = 17.4 (12.54) Mdn = 15.0 <i>N</i> = 250 Range = 0 – 63	Pop. est. <i>M (SD)</i> = 15.9 (11.96) Mdn = 14.0 - -	
	0	3/250 (1.2)	1.4 (0.0, 2.8)
	1	2/250 (0.8)	0.8 (0.0, 1.7)
	2	4/250 (1.6)	1.9 (0.0, 4.0)
	3 or more	241/250 (96.4)	95.9 (93.0, 98.8)
Number of regular <sup>2</sup> sexual partners	Sample <i>M (SD)</i> = 2.1 (1.59) Mdn = 2.0 <i>N</i> = 250	Pop. est. <i>M (SD)</i> = 2.1 (1.59) Mdn = 2.0 -	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Range =0 - 10   -		
	0	19/250 (7.6)	8.0 (3.8, 12.1)
	1	90/250 (36.0)	33.3 (27.3, 39.4)
	2	85/250 (34.0)	34.7 (28.1, 41.3)
	3 or more	56/250 (22.4)	24.0 (18.3, 29.8)
Condom use at last anal sex with a male partner	Yes	123/250 (49.2)	51.3 (44.7, 57.7)

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis

More than half (55.4%) of TGW in Jaffna had ever received money, goods or services in exchange for sex. Among them, almost all (97.6%) have received money, goods or services in exchange for sex in the past 12 months, with their last paying partner, in most cases (97.1%), being a man. One in five (22.6%) TGW women in Jaffna have ever given money, goods or services in exchange for sex and among them, 81.6% had given money, goods or services in exchange for sex in the past 12 months, with their last partner, in most cases (99.4%) being a man. Condom use at transactional sex was somewhat low; 70.9% used a condom at last sex they were paid for, and 60.8% used a condom at last sex they paid for.

**Table 312: Transactional sex**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever received money, goods or services in exchange for sex	Yes Don't remember	129/251 (51.4) 1/252 (0.4)	55.4 (49.1, 61.6) -
Received money, goods or services in exchange for sex in the past 12 months	Yes	127/129 (98.4)	97.6 (93.8, 100)
Sex of partner at last sex for which money was received	Woman Man Other	2/129 (1.6) 126/129 (97.7) 1/129 (0.8)	2.5 (0.0, 6.2) 97.1 (93.5, 100) 0.3 (0.0, 0.6)
Used a condom at last sex for which money was received	Yes Don't remember	87/125 (69.6) 4/129 (3.1)	70.9 (62.5, 79.5) -
Ever given money, goods or services in exchange for sex	Yes Rather not say	57/251 (22.7) 1/252 (0.4)	22.6 (17.6, 27.6) -
Gave money, goods or services in exchange for sex with in the past 12 months	Yes	44/57 (77.2)	81.6 (75.0, 90.0)
Sex of partner at last sex for which money was given	Woman Man	1/57 (1.8) 56/57 (98.2)	1.6 (0.0, 3.8) 98.4 (96.2, 100)
Used a condom at last sex for which money, goods or services were given	Yes Don't remember	34/56 (60.7) 1/57 (1.7)	60.8 (44.9, 76.8) -

Almost all (98.6%) TGW in Jaffna had a casual male sexual partner in the six months before the survey. Among them, few have used a condom consistently (9.2%) or almost every time (40.0%) in

the past six months, although about half (52.0%) did use a condom at last anal sex with a casual partner. Those who have not used a condom at last anal sex with a casual sexual partner in most cases did so because they believe condoms take away pleasure (32.1%) or because they do not like condoms (30.4%). Finally, two in three (61.4%) TGW in Jaffna did not know or ask their last casual male sexual partner about his HIV status.

**Table 313: Casual Male Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Had a casual <sup>1</sup> partner in the past 6 months	Yes	247/250 (98.8)	98.6 (97.3, 99.7)
Frequency of condom use in the past 6 months	Every time	17/244 (7.0)	9.2 (4.1, 14.4)
	Almost every time	93/244 (38.1)	40.0 (33.5, 46.6)
	Sometimes	55/244 (22.5)	24.0 (18.2, 29.7)
	Never	79/244 (32.4)	26.8 (22.1, 31.5)
	Have not had a casual partner in the last 6 months	3/247 (1.2)	-
Condom use at last anal sex with a casual partner	Yes	121/245 (49.4)	52.0 (45.5, 58.4)
	No	124/245 (50.6)	48.0 (41.6, 54.5)
	Don't remember	1/247 (0.4)	-
	Rather not say	1/247 (0.4)	-
Reasons for not using a condom (multiple answers)	Never heard of condoms	0/123 (0.0)	-
	Don't know how to obtain a condom	3/123 (2.4)	5.8 (0.0, 13.2)
	I didn't think it was necessary	15/123 (12.2)	11.6 (6.0, 17.2)
	I didn't think of it	16/123 (13.0)	12.9 (7.0, 18.8)
	Not available	26/123 (21.1)	22.8 (15.0, 30.7)
	Too expensive	1/123 (0.8)	1.0 (0.0, 2.8)
	Partner objected	21/123 (17.1)	16.0 (9.6, 22.4)
	Don't like them	36/123 (29.3)	30.4 (21.7, 38.9)
	Condoms takes away pleasure	40/123 (32.5)	32.1 (22.8, 41.5)
HIV status of the last casual partner	HIV-negative	102/247 (41.3)	38.3 (31.8, 45.0)
	HIV-positive	1/247 (0.4)	0.2 (0.0, 0.5)
	I did not know / ask	144/247 (58.3)	61.4 (54.7, 68.0)

<sup>1</sup> Casual relationship is one without expectations of monogamy or a long-term commitment; <sup>2</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis

A majority (92.0%) of TGW in Jaffna had a regular male sexual partner in the six months before the survey, and most met their last regular male sexual partner either in a public place, such as in a street, park or in public transport (31.7%) or through friends (24.2%). Among TGW in Jaffna who had a regular sexual partner in the past six months, very few (5.1%) used a condom consistently during sex, and as many as one in three (31.6%) have never used a condom during sex with a regular partner. Similarly, only 30.2% of TGW used a condom at last anal sex with a regular partner. Those who have not used a condom at last anal sex with a regular sexual partner in most cases did so because they don't like condoms (36.0%), because they believe condoms take away pleasure (31.4%) or because

their partner objected (27.8%). Finally, as many as one in three (37.6%) TGW in Jaffna did not know or ask their last regular male sexual partner about his HIV status.

**Table 314: Regular Male Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Had a regular <sup>1</sup> partner in the past 6 months	Yes	231/250 (92.4)	92.0 (88.0, 96.2)
Frequency of condom use in the past 6 months	Every time	11/231 (4.8)	5.1 (2.2, 8.0)
	Almost every time	71/231 (30.7)	30.7 (24.3, 37.1)
	Sometimes	63/231 (27.3)	32.6 (26.1, 39.5)
	Never	86/231 (37.2)	31.6 (26.1, 36.7)
Condom use at last anal sex with a regular partner	Yes	79/231 (34.2)	30.2 (24.7, 35.5)
Reasons for not using a condom (multiple answers)	Never heard of condoms	1/152 (0.7)	0.4 (0.0, 1.0)
	Don't know how to obtain a condom	2/152 (1.3)	1.2 (0.0, 2.5)
	I didn't think it was necessary	11/152 (7.2)	7.1 (2.7, 11.6)
	I didn't think of it	17/152 (11.2)	11.3 (5.9, 16.7)
	Not available	31/152 (20.4)	21.2 (14.6, 27.8)
	Too expensive	2/152 (1.3)	0.8 (0.0, 1.6)
	Partner objected	36/152 (23.7)	27.8 (19.3, 36.4)
	Don't like them	55/152 (36.2)	36.0 (28.1, 43.8)
Condoms takes away pleasure	52/152 (34.2)	31.4 (22.9, 39.6)	
How last regular partner was met <sup>2</sup>	Brothel	0/229 (0.0)	-
	Bar, café, disco or restaurant	3/229 (1.3)	1.7 (0.0, 3.4)
	Hotel	6/229 (2.6)	4.5 (0.0, 9.3)
	Street, park or public transport	86/229 (37.6)	31.7 (25.2, 38.2)
	Through friends	60/229 (26.2)	24.2 (18.9, 29.4)
	Internet (e.g. Facebook), chat, or SMS	8/229 (3.5)	2.6 (1.2, 4.0)
	Motel or Guest House	7/229 (3.1)	2.1 (0.9, 3.3)
	School	8/229 (3.5)	3.1 (1.3, 5.0)
	Party	20/229 (8.7)	11.2 (6.2, 16.1)
	Intermediary	12/229 (5.2)	7.5 (2.7, 12.2)
	Service station	3/229 (1.3)	1.1 (0.1, 2.1)
	Truck stop	2/229 (0.9)	1.0 (0.0, 2.2)
	Message Parlour / Spa	3/229 (1.3)	0.8 (0.2, 1.4)
	Other	0/229 (0.0)	-
	Rather not say	11/229 (4.8)	8.6 (2.3, 14.9)
HIV status of the last regular partner	HIV-negative	2/231 (0.9)	-
	HIV-positive	136/230 (59.1)	62.4 (56.0, 68.8)
	I did not know / ask	0/230 (0.0)	-
	Rather not say	94/230 (40.9)	37.6 (31.2, 44.0)
		1/231 (0.4)	0.3 (0.0, 0.7)

<sup>1</sup> A regular partner is someone you are in a relationship with or married to and who you see or have sex with on a regular basis;

Hardly any TGW in Jaffna has had a female sexual partner in the year before the survey (0.3%).

**Table 315: Female Sexual Partners**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Had a female sexual partner in the past 12 months <sup>1</sup>	Among all	1/248 (0.4)	0.3 (0.0, 0.6)
	Among those who ever had vaginal sex with a woman	1/10 (10.0)	-
Frequency of condom use with female sexual partners in the past 12 months <sup>1</sup>	Every time	0 (0.0)	-
	Almost every time	1/1 (100)	-
	Sometimes	0/1 (0.0)	-
	Never	0/1 (0.0)	-
Condom use at last sex with a female partner <sup>1</sup>	Yes	0/1 (0.0)	-
HIV status of the last female partner <sup>1</sup>	HIV-negative	1/1 (100)	-
	HIV-positive	0/1 (0.0)	-
	I did not know / ask	0/1 (0.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

For the majority of TGW in Jaffna, their last sexual partner was a man (99.7%) and at last sexual intercourse or anal sex only one in three TGW women in Jaffna used a condom (37.7%).

**Table 316: Last Sexual Partner**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sex of last sexual partner	Woman	1/251 (0.4)	0.3 (0.0, 0.7)
	Man	250/251 (99.6)	99.7 (99.3, 100)
	Rather not say	1/252 (0.4)	-
Condom use at last sexual intercourse or anal sex	Yes	92/252 (36.5)	37.7 (31.5, 44.0)

### Use of Condoms and Lubricants

Very few (5.7%) of TGW in Jaffna have never heard of condoms. Among those who have, most (94.6%) also know where to obtain condoms. Specifically, TGW in Jaffna most often obtain condoms from private pharmacies or chemists (62.5%) or NGOs and outreach services (43.7%). Two in three TGW in Jaffna find condoms to be affordable (63.2%). Although over two-thirds of TGW in Jaffna (71.3%) have ever heard of lubricants much fewer use a lubricant always or usually (3.5 and 16.8%, respectively). As lubricant, most use saliva/water (38.4%) or baby oil (32.4%).

**Table 317: Use of condoms and lubricants**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of condoms	Yes	236/252 (93.7)	94.3 (91.8, 96.7)
Knows where to obtain condoms	Yes	220/236 (93.2)	94.6 (92.5, 96.8)
Usually obtains condoms from: (multiple response)	Government clinic - STD clinic	34/220 (15.5)	17.4 (11.2, 23.6)
	Govt. clinic - Not STD clinic	0/220 (0.0)	-
	Private clinic	5/220 (2.3)	1.7 (0.1, 3.2)
	Private pharmacy or chemist	137/220 (62.3)	62.5 (55.3, 69.7)
	Traditional healer/herbalist	1/220 (0.5)	1.2 (0.0, 3.3)
	Neighbourhood market/stand	5/220 (2.3)	2.9 (0.9, 4.8)
	Friends	23/220 (10.5)	11.1 (6.6, 15.4)
	Sex partner/s	22/220 (10.0)	12.0 (6.9, 17.2)
	Bar / Nightclub	1/220 (0.5)	0.3 (0.0, 0.7)
	NGOs/ outreach service	83/220 (37.7)	43.7 (36.5, 50.8)
Other	1/220 (0.5)	0.4 (0.0, 0.8)	
Affordability of male condoms	Affordable	155/236 (65.7)	63.2 (56.7, 69.8)
	Somewhat affordable	46/236 (19.5)	19.3 (14.5, 24.1)
	Not affordable	2/236 (0.8)	0.5 (0.0, 0.9)
	Don't know	33/236 (14.0)	16.9 (11.4, 22.5)
Ever heard of lubricants	Yes	171/248 (69.0)	71.3 (65.4, 77.1)
	No	77/248 (31.0)	28.7 (22.9, 34.6)
	Rather not say	4/252 (1.6)	-
Frequency of lubricant use during vaginal or anal sex	Always	6/170 (3.5)	3.5 (0.3, 6.7)
	Usually	18/170 (10.6)	16.8 (9.5, 25.3)
	Sometimes	74/170 (43.5)	41.4 (33.2, 49.2)
	Rarely	16/170 (9.4)	8.6 (4.1, 12.9)
	Never	56/170 (32.9)	29.7 (21.6, 37.0)
	Rather not say	1/171 (0.6)	0.7 (0.0, 1.8)
Type of lubricant used (multiple response)	Glycerine	7/113 (6.2)	6.6 (2.5, 10.6)
	Saliva or water	50/113 (44.2)	38.4 (28.3, 48.7)
	Vaseline	21/113 (18.6)	19.2 (10.3, 28.4)
	Baby oil	37/113 (32.7)	32.4 (22.5, 42.1)
	Lotion	33/113 (29.2)	30.1 (20.5, 39.8)
	Other oil	23/113 (20.4)	21.3 (12.6, 29.8)
	Water-based	10/113 (8.8)	13.7 (4.9, 22.1)
	Silicone-based	3/113 (2.7)	2.3 (0.0, 4.8)
	Soap	0/113 (0.0)	-
	Whatever we get from peer educator(s), don't know what it is	1/113 (0.9)	0.7 (0.0, 1.4)
	Don't know	1/113 (0.9)	0.6 (0.0, 1.4)

## Sexually Transmitted Infections

Approximately four in five (79.3%) TGW in Jaffna have ever heard of diseases that can be transmitted sexually. With regard to recognizing and describing symptoms of an STI, most of them know that genital ulcers or sores and abnormal genital discharge (56.4 and 4.8%, respectively) in women and genital ulcers or sores and swelling in the groin area (69.3 and 31.5%, respectively) in men indicate a possible sexually transmitted infection. One in ten (10.4%) TGW in Jaffna had a symptom of a sexually transmitted infection (i.e., a discharge or genital ulcer (sore)), and few (2.4) received an STI diagnosis in the year preceding the survey.

**Table 318: Sexually transmitted infections**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever heard of diseases that can be transmitted sexually	Yes	201/252 (79.8)	79.3 (73.7, 84.9)
Can describe symptoms of sexually transmitted infections in women (multiple response)	1. Abdominal pain	35/201 (17.4)	17.3 (12.1, 22.5)
	2. Abnormal genital discharge	86/201 (42.8)	45.8 (38.6, 52.8)
	3. Burning pain on urination	38/201 (18.9)	17.7 (12.4, 22.9)
	4. Genital ulcers or sores	119/201 (59.2)	56.4 (48.7, 64.0)
	5. Swelling in groin area	27/201 (13.4)	10.4 (6.9, 13.8)
	6. Itching	10/201 (4.9)	3.7 (1.1, 6.4)
	7. Don't know any	6/201 (3.5)	5.3 (0.0, 11.0)
Symptoms mentioned (0-6)	0	6/201 (3.0)	5.3 (0.0, 11.2)
	1	96/201 (47.8)	47.1 (39.8, 54.6)
	2	79/201 (39.3)	39.0 (31.6, 45.9)
	3	19/201 (9.5)	8.3 (5.0, 11.5)
	4	1/201 (0.5)	0.4 (0.0, 1.0)
	5	0/201 (0.0)	-
	6	0/201 (0.0)	-
Can describe symptoms of sexually transmitted infections in men (multiple response)	1. Genital discharge	27/201 (13.4)	13.9 (8.9, 18.9)
	2. Burning pain on urination	22/201 (10.9)	11.4 (6.9, 15.8)
	3. Genital ulcers or sores	141/201 (70.1)	69.3 (62.2, 76.5)
	4. Swelling in groin area	67/201 (33.3)	31.5 (24.8, 38.0)
	5. Itching	34/201 (16.9)	18.6 (12.0, 25.2)
	6. Don't know any	6/201 (3.0)	5.4 (0.0, 11.3)
Symptoms mentioned (0-6)	0	6/201 (3.0)	5.3 (0.0, 10.9)
	1	115/201 (57.2)	55.2 (47.2, 63.3)
	2	64/201 (31.8)	28.7 (21.4, 35.9)
	3	16/201 (8.0)	10.8 (6.1, 15.5)
	4	0/201 (0.0)	-
	5	0/201 (0.0)	-
Tested for sexually transmitted diseases in the past 3 months	Yes	44/251 (17.5)	23.2 (15.9, 30.6)
	No	207/251 (82.5)	76.8 (69.4, 84.1)
	Rather not say	1/252 (0.4)	-

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Received an STI diagnosis in the past 12 months	Yes	4/288 (2.0)	2.4 (0.2, 4.7)
	No	184/188 (97.9)	97.6 (95.3, 99.8)
	Don't know	12/201 (6.0)	-
	Rather not say	1/201 (0.5)	-
Had a discharge or genital ulcer (sore) in the last 12 months	Yes	30/247 (12.1)	10.4 (6.9, 14.0)
	No	217/247 (87.9)	89.6 (86.0, 93.1)
	Don't know	2/252 (0.8)	-
	Rather not say	3/252 (1.2)	-
Sought treatment <sup>1</sup>	Yes	10/30 (33.3)	(41.1 (24.0, 59.9))
	No	20/30 (66.7)	(58.9 (41.0, 76.0))
Places where treatment was sought (multiple response) <sup>1</sup>	Government clinic - STD clinic	4/10 (40.0)	-
	Govt. clinic - Not STD clinic	1/10 (10.0)	-
	Private clinic	4/10 (40.0)	-
	Private pharmacy or chemist	1/10 (10.0)	-
	Traditional healer/herbalist	0/10 (0.0)	-
	I used medicine or herbs from home	0/10 (0.0)	-
Reasons for seeking treatment from that source (multiple response) <sup>1</sup>	Confidentiality	1/10 (10.0)	-
	Affordability	1/10 (10.0)	-
	Recommended by friend or acquaintance	5/10 (50.0)	-
	Quality and/or specialized care given at this place	0/10 (0.0)	-
	Knows the caregivers	3/10 (30.0)	-
	Known friendliness of the caregivers	1/10 (10.0)	-
	Proximity/location	0/10 (0.0)	-
Reasons for not seeking treatment (multiple response) <sup>1</sup>	Didn't know where to go for treatment	1/20 (5.0)	(5.2 (0.0, 13.0))
	Embarrassed or afraid to seek treatment	17/20 (85.0)	(85.2 (73.1, 97.6))
	Could not afford treatment	3/20 (15.0)	(12.5 (2.4, 22.6))
	Unable to get transportation	0/20 (0.0)	-
	Didn't think I needed it	2/20 (20.0)	10.0 (0.0, 19.9))

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

### Use of Prevention Programs

Among TGW in Jaffna who had ever tested for HIV, a majority (85.9%) told their counsellor/health care provider that they are a TGW at their last HIV testing. In addition, all of them were satisfied or very satisfied with the quality of services provided at the place where they received their last HIV test.

**Table 319: Contact with healthcare providers**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
<b>STI treatment</b>			
Told the healthcare provider that they are a TGW woman when the last treatment for any symptom of an STI or a diagnosis for an STI was received <sup>1</sup>	Yes	3/9 (33.3)	-
	No	6/9 (66.7)	-
	Rather not say	1/10 (10.0)	-
Satisfaction with how the healthcare provider treated them during this last visit <sup>1</sup>	Very satisfied	6/10 (60.0)	-
	Somewhat satisfied	3/10 (30.0)	-
	Not satisfied	1/10 (10.0)	-
<b>HIV testing</b>			
Told the counsellor/health care provider that they are TGW woman when last HIV test was received <sup>1</sup>	Yes	39/46 (84.8)	(85.9 (81.1, 91.1))
	No	7/46 (15.2)	(14.1 (8.9, 18.9))
Satisfaction with the quality of services provided at the place where the last HIV test was received <sup>1</sup>	Very satisfied	29/46 (63.0)	(60.0 (46.1, 73.0))
	Satisfied	17/46 (37.0)	(40.0 (27.0, 53.9))
	A little satisfied	0/46 (0.0)	-
	Not satisfied	0/46 (0.0)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

In the year preceding the survey, one-third (31.5%) of TGW in Jaffna had sought medical care, and among them, 20.9% experienced some difficulty getting medical care when they sought it, in most cases related to location (being too far away). Half of TGW in Jaffna received injections that contain feminizing hormones in the past six months (49.3%). Among them, very few (1.0%) have at least once used a needle that someone else used before. Four in five TGW in Jaffna (85.0%) had a gender enhancement or transition procedure and very few (4.0%) have a surgically constructed vagina.

**Table 320: Use of healthcare services**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Sought medical care for any reason in the past 12 months	Yes	76/251 (30.3)	31.5 (25.4, 37.4)
	No	175/251 (69.7)	68.5 (62.6, 74.6)
	Don't know	1/252 (0.4)	-
Had difficulty getting medical care when they sought it	Yes	19/76 (25.0)	20.9 (11.8, 30.1)
Type of difficulty (multiple response)	Too expensive	0/19 (0.0)	-
	Too far away	10/19 (52.6)	-
	Could not take time from work	5/19 (26.3)	-
	Long waiting times	7/19 (36.8)	-
Received injections that contain feminizing hormones in the past 6 months	Yes	117/252 (46.4)	49.3 (42.8, 55.9)

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Used a needle that someone else used before to inject hormones in the past 6 months	Yes	1/103 (1.0)	1.0 (0.0, 3.1)
	No	102/103 (99.0)	99.0 (96.9, 100)
	Don't know	12/115 (10.4)	-
Had a gender enhancement or transition procedure	Yes	225/252 (89.3)	85.0 (79.0, 91.0)
Has a surgically constructed vagina	Yes	12/250 (4.8)	4.0 (1.6, 6.4)
	No	238/250 (95.2)	95.9 (93.5, 98.4)
	Rather not say	2/252 (0.8)	-

Slightly less than half of TGW in Jaffna have been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the three months preceding the survey (42.9%). Among those who have, most have received general HIV/STI prevention/transmission information (75.4%), one-third received counselling on condom use and safe sex (36.9%) and about one in four received condoms and lubricants (26.7%). In addition, one in four (23.2%) TGW in Jaffna has tested for an STI in the three months preceding the survey. Coverage by HIV prevention programs, defined as receipt of at least two interventions (i.e., Given condoms and lubricant; Counselling on condom use and safe sex; Received an STI test) in the past three months, is somewhat low, at 14.7%.

**Table 321: Coverage of HIV prevention programs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Has been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the past 3 months	Yes	101/251 (40.2)	42.9 (36.2, 49.4)
	No	150/251 (59.8)	56.8 (50.3, 63.5)
	Don't know	1/252 (0.4)	-
Services received	General HIV/STI prevention/transmission information	82/100 (18.0)	75.4 (64.1, 87.0)
	Condoms and lubricants	20/100 (20.0)	26.7 (14.7, 38.5)
	Referral for STI treatment	9/100 (9.0)	9.0 (3.0, 14.8)
	Referral for VCT	1/100 (1.0)	1.7 (0.0, 5.2)
	Counselling on condom use and safe sex	32/100 (32.0)	36.9 (23.9, 49.7)
	Rather not say	1/101 (1.0)	-
Tested for sexually transmitted diseases in the past 3 months	Yes	44/251 (17.5)	23.2 (15.9, 30.6)
	No	207/251 (82.5)	76.8 (69.4, 84.1)
	Rather not say	1/252 (0.4)	-
3.7 Coverage of HIV prevention programs <sup>1</sup>		29/252 (11.5)	14.7 (8.4, 21.0)

<sup>1</sup> Received at least two interventions in the past three months (Given condoms and lubricant; Counselling on condom use and safe sex; Tested for sexually transmitted infections in the past three months)

## Experiences of Discrimination and Violence on the basis of being a TGW woman

Few TGW in Jaffna have been refused health care (2.5%) and about one in ten TGW in Jaffna has been refused police assistance on the basis of being a TGW (13.7%). Prevalence of violence is very high, with close to one-third (30.0%) of TGW in Jaffna experiencing verbal harassment, 6.8% experiencing physical violence, and 4.8% experiencing sexual violence.

**Table 322: Experiences of discrimination and violence on the basis of being a TGW woman**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Refused health care	Yes	8/252 (3.2)	2.5 (1.1, 4.0)
	No	244/252 (96.8)	97.5 (96.0, 98.9)
Refused police assistance	Yes	42/251 (16.7)	13.7 (9.8, 17.6)
	No	209/251 (83.3)	86.3 (82.4, 90.2)
	Don't know	1/252 (0.4)	-
Verbally insulted	Yes	77/251 (30.7)	30.0 (24.2, 35.7)
	No	174/251 (69.3)	70.0 (64.3, 75.8)
	Don't know	1/252 (0.4)	-
Hit, kicked, or beaten	Yes	21/250 (8.4)	6.8 (4.2, 9.5)
	No	229/250 (91.6)	93.2 (90.5, 95.8)
	Don't know	2/252 (0.8)	-
Sexually assaulted or raped	Yes	12/244 (4.9)	4.8 (2.2, 7.4)
	No	232/244 (95.1)	95.2 (92.6, 97.8)
	Don't know	2/252 (0.8)	-
	Rather not say	6/252 (2.4)	-
Sexual assailant/rapist <sup>1</sup>	Stranger	6/11 (54.5)	-
	Social acquaintance	2/11 (18.2)	-
	Family/relative	0/11 (0.0)	-
	Police	0/11 (0.0)	-
	Paying sexual partner (Client)	2/11 (18.2)	-
	Non-paying partner or boyfriend/ girlfriend	1/11 (9.1)	-
	Rather not say	1/12 (8.3)	-
Sought medical treatment for sexual assault/rape <sup>1</sup>	Yes	3/12 (25.0)	-
Reported sexual assault/rape to the police <sup>1</sup>	Yes	2/11 (18.2)	-
	No	9/11 (81.8)	-
	Rather not say	1/12 (8.3)	-

<sup>1</sup> Because results based on a small number of observations are less reliable, results based on fewer than 20 observations in a marginal cell are not reported. Results based on 20 to 49 observations in a marginal cell are reported in parentheses.

## Use of Alcohol and Drugs

Slightly less than half of TGW in Jaffna have ever had a drink containing alcohol (42.7%), and among those who have, 40.8% have a drink containing alcohol at least once a week.

**Table 323: Alcohol consumption**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever had a drink containing alcohol	Yes	102/250 (40.8)	42.7 (36.1, 49.1)
	No	148/250 (59.2)	57.3 (50.9, 63.9)
	Don't know	1/252 (0.4)	-
	Rather not say	1/252 (0.4)	-
Alcohol consumption in the past month	I never drink alcohol	2/100 (2.0)	1.3 (0.0, 2.8)
	At least once a week	43/100 (43.0)	40.8 (29.7, 52.5)
	Less than once a week	29/100 (29.0)	34.0 (21.9, 45.8)
	Never in the past month	17/100 (17.0)	18.3 (8.1, 28.2)
	Every day	9/100 (9.0)	5.5 (2.1, 8.9)
	Rather not say	2/102 (2.0)	-

Drug use is very low among TGW in Jaffna, with very few having ever used any non-prescribed/illicit drugs.

**Table 324: Use of non-prescribed/illicit drugs**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Type of drug used			
Heroin	Frequency of consumption		
	Have never used	215/250 (86.0)	87.3 (83.5, 91.0)
	Never in the past 12 months	0/250 (0.0)	-
	Monthly or less	0/250 (0.0)	-
	Several times a month	0/250 (0.0)	-
	Two to four times a month	0/250 (0.0)	-
	Two to three times a week	0/250 (0.0)	-
	Four or more times a week	0/250 (0.0)	-
	Don't know <sup>1</sup>	35/250 (14.0)	12.7 (9.0, 16.5)
Rather not say	2/252 (0.8)	0.4 (0.1, 0.7)	
Cannabis	Frequency of consumption		
	Have never used	204/252 (81.0)	80.8 (75.8, 85.7)
	Never in the past 12 months	4/252 (1.6)	3.2 (0.1, 6.3)
	Monthly or less	1/252 (0.4)	1.0 (0.0, 2.9)
	Several times a month	1/252 (0.4)	0.3 (0.0, 0.6)
	Two to four times a month	0/252 (0.0)	-
	Two to three times a week	2/252 (0.8)	0.6 (0.1, 1.0)
	Four or more times a week	1/252 (0.4)	0.3 (0.0, 0.7)
Don't know <sup>1</sup>	39/252 (15.5)	13.9 (10.0, 17.7)	
Cocaine	Frequency of consumption		
	Have never used	211/252 (76.2)	85.6 (81.7, 89.5)
	Never in the past 12 months	0/252 (0.0)	-
	Monthly or less	0/252 (0.0)	-
Several times a month	0/252 (0.0)	-	

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Two to four times a month Two to three times a week Four or more times a week Don't know <sup>1</sup>	0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 60/252 (23.8)	- - - 14.4 (10.5, 18.3)
Ecstasy	Frequency of consumption Have never used Never in the past 12 months Monthly or less Several times a month Two to four times a month Two to three times a week Four or more times a week Don't know <sup>1</sup>	192/252 (76.2) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 0/252 (0.0) 60/252 (23.8)	74.3 (68.5, 80.0) - - - - - - - 25.7 (20.0, 31.5)
Amphetamines	Frequency of consumption Have never used Never in the past 12 months Monthly or less Several times a month Two to four times a month Two to three times a week Four or more times a week Don't know <sup>1</sup> Rather not say	192/250 (76.8) 0/250 (0.0) 0/250 (0.0) 0/250 (0.0) 0/250 (0.0) 0/250 (0.0) 0/250 (0.0) 0/250 (0.0) 58/250 (23.2) 2/252 (0.8)	74.1 (68.2, 80.1) - - - - - - - 25.9 (19.9, 31.8) -
Opium	Frequency of consumption Have never used Never in the past 12 months Monthly or less Several times a month Two to four times a month Two to three times a week Four or more times a week Don't know <sup>1</sup> Rather not say	189/251 (75.3) 0/251 (0.0) 0/251 (0.0) 0/251 (0.0) 0/251 (0.0) 0/251 (0.0) 0/251 (0.0) 0/251 (0.0) 62/251 (24.7) 1/252 (0.4)	73.9 (67.9, 79.9) - - - - - - - 26.1 (20.1, 32.1) -
Hashish	Frequency of consumption Have never used Never in the past 12 months Monthly or less Several times a month Two to four times a month Two to three times a week Four or more times a week Don't know <sup>1</sup> Rather not say	196/251 (78.1) 0/251 (0.0) 1/251 (0.4) 0/251 (0.0) 0/251 (0.0) 0/251 (0.0) 0/251 (0.0) 0/251 (0.0) 54/251 (21.5) 1/252 (0.4)	76.6 (70.9, 82.3) - 0.3 (0.0, 0.8) - - - - - 23.1 (17.4, 28.8) -
Other drugs	Frequency of consumption		

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
	Have never used	193/252 (76.6)	75.7 (70.2, 81.0)
	Never in the past 12 months	2/252 (0.8)	2.2 (0.0, 5.0)
	Monthly or less	2/252 (0.8)	1.2 (0.0, 3.0)
	Several times a month	0/252 (0.0)	-
	Two to four times a month	15/252 (6.0)	6.0 (3.3, 8.6)
	Two to three times a week	0/252 (0.0)	-
	Four or more times a week	3/252 (1.2)	1.7 (0.1, 3.3)
	Don't know <sup>1</sup>	37/252 (14.7)	13.3 (9.4, 17.2)

<sup>1</sup> For each of the type of drug there is a significant proportion of the response 'Don't know.' Although it is possible that it refers to not knowing the frequency of drug use, it is more likely that it indicates never have heard of the particular type of drug.

Very few TGW in Jaffna have ever injected drugs (0.3%), and among those who have, none have injected drugs in the year before the survey.

**Table 325: Use of non-prescribed/illicit drugs by injection**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Ever injected drugs for non-medical purposes	Yes	3/243 (1.2)	0.8 (0.2, 1.3)
	No	240/243 (98.8)	99.2 (98.7, 100)
	Don't know	2/252 (0.8)	-
	Rather not say	7/252 (2.8)	-
Ever used non-sterile injecting equipment when injecting drugs	Yes	0/3 (0.0)	-
Safe injecting practice <sup>1</sup>	Yes	0/3 (0.0)	-

<sup>1</sup> % Used a sterile needle and syringe at last injection

**Table 326: Use of non-prescribed/illicit drugs by injection in the past 12 months**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Injected drugs for non-medical purposes in the past 12 months		0/3 (0.0)	-

### Use of Media

Regarding media use, TGW in Jaffna most frequently watch TV (most days or every day: 94.1%) or listen to the radio (most days or every day: 71.2%). Much fewer ever read the newspaper (52.8%). Two in three TGW in Jaffna ever use the Internet (61.0%) and about one-third at least sometimes use the Internet to find sexual partners (38.2%). Finally, almost all (99.0%) TGW in Jaffna have a mobile phone.

**Table 327: Use of media in the past 30 days**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Radio	Never	65/249 (26.1)	22.9 (18.2, 27.6)
	Once a month	1/249 (0.4)	0.3 (0.0, 0.6)
	Once a week	16/249 (6.4)	5.6 (3.2, 8.1)
	Most days	115/249 (46.2)	51.0 (44.3, 57.7)
	Every day	52/249 (20.9)	20.2 (15.5, 24.5)
	Rather not say	3/252 (1.2)	-
TV	Never	8/250 (3.2)	2.2 (1.1, 3.4)
	Once a month	1/250 (0.4)	0.2 (0.0, 0.5)
	Once a week	6/250 (2.4)	3.4 (0.0, 7.2)
	Most days	132/250 (52.8)	54.8 (48.4, 45.3)
	Every day	103/250 (41.2)	39.3 (33.0, 45.3)
	Rather not say	2/252 (0.8)	-
Newspaper	Never	83/241 (34.4)	36.4 (30.2, 42.6)
	Once a month	2/241 (0.8)	0.8 (0.0, 1.6)
	Once a week	18/241 (7.5)	9.8 (4.5, 15.2)
	Most days	98/241 (40.7)	35.0 (29.0, 40.7)
	Every day	39/241 (16.2)	17.8 (11.6, 25.2)
	Don't know	1/241 (0.4)	0.2 (0.0, 0.5)
Rather not say	11/252 (4.4)	-	
Internet	Never	95/228 (41.7)	39.0 (31.8, 46.0)
	Once a month	1/228 (0.4)	0.4 (0.0, 1.0)
	Once a week	2/228 (0.9)	1.4 (0.0, 2.6)
	Most days	101/228 (44.3)	45.8 (38.2, 53.4)
	Every day	29/228 (12.7)	13.5 (8.4, 18.6)
	Rather not say	24/252 (9.5)	-
Uses Internet to find sexual partners	Never	130/215 (60.5)	61.8 (54.1, 69.7)
	Once a month	0/215 (0.0)	-
	Once a week	16/215 (7.4)	6.7 (3.2, 10.2)
	Most days	66/215 (30.7)	30.4 (23.2, 37.4)
	Every day	3/215 (1.4)	1.1 (0.0, 2.0)
	Rather not say	37/252 (14.7)	-
Has a mobile phone	Yes	248/252 (98.4)	99.0 (98.3, 99.7)

**Multiplier questions**

In May, June or July of 2017, 76.9% of TGW in Jaffna have received any services (educational leaflets, condoms, HIV counselling) from the NGO Journey for Healthy Life. Somewhat fewer (44.6%) have received condoms from the same NGO and 27.8% were escorted by NGO Journey for Healthy Life's staff to an STI clinic. About one in three TGW woman in Jaffna (33.9%) received a leather bracelet by peer educators during their outreach work in October 2017.

**Table 328: Multiplier questions**

Characteristic	Responses	Sample proportion n/N (%)	Population estimates % (95% CI)
Received any services (educational leaflets, condoms, HIV counselling) from the NGO Journey for Healthy Life in Jaffna in May, June or July 2017	Yes	193/252 (76.6)	76.9 (71.3, 82.5)
	No	59/252 (23.4)	23.1 (17.5, 28.7)
Received condoms from the NGO Journey for Healthy Life in Jaffna in May, June or July 2017	Yes	99/252 (39.3)	44.6 (37.6, 51.5)
	No	153/252 (60.7)	55.4 (48.5, 62.4)
Escorted to an STI clinic by the staff of the NGO Journey for Healthy Life in Jaffna in May, June or July 2017?	Yes	61/250 (24.4)	27.8 (21.1, 34.7)
	No	189/250 (75.6)	72.2 (65.3, 79.0)
	Don't know	2/252 (0.8)	-
Received a Leather Bracelet by peer educators (staff of the NGO Journey for Healthy Life in Jaffna) between 23-31 October 2017 during their outreach work	Yes	75/247 (30.4)	33.9 (26.6, 41.3)
	No	172/247 (69.6)	66.1 (58.7, 73.4)
	Don't know	4/251 (1.6)	-
	Rather not say	1/252 (0.4)	-
Participated in the first IBBS in Sri Lanka in 2014	Yes	18/250 (7.2)	7.2 (3.0, 11.3)
	No	232/250 (92.8)	92.9 (88.7, 97.0)
	Don't know	1/252 (0.4)	-
	Rather not say	1/252 (0.4)	-
	In Colombo	18/18 (100)	-
	In Galle	0/18 (0.0)	-
	In Anuradhapura	0/18 (0.0)	-

## 4. Multivariate analysis

### 4.1 FSW

#### Colombo

Factors associated with knowing HIV status from an HIV test, using a condom at last sex with a paying partner, and prevention programme reach were assessed using multivariate logistic regression analysis adjusted for RDS complex sampling design using RDS-Analyst. The results are presented in Table X. In the first model, contact with an NGO or a healthcare provider in the past 3 months was the only significant correlate of knowing HIV status from an HIV test. FSW who were in contact with an NGO or a healthcare provider in the past 3 months were more likely to know their HIV status from an HVI test. FSW who had more paying partners in the 30 days before the survey were less likely, and those who completed higher levels of education were more likely to have used a condom at last sex with a paying partner. Finally, there were several significant correlates of prevention programme reach. Specifically, earning more, holding a discriminatory attitude towards PLHIV and using a condom at last sex with a paying partner were all negatively related with the prevention programme reach. On the other hand, FSW in a relationship, those who had more paying partners in the month before the survey, those who answered correctly to all five questions about HIV prevention and transmission and those who know their HIV status from an HIV test were more likely to have been reached by the HIV prevention programme.

**Table 329: Factors associated with knowing one's HIV status from an HIV test (Model 1), using a condom at last sex (Model 2) and prevention programme reach (Model 3); adjusted for RDS complex sampling design using RDS-Analyst**

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 441) aOR <sup>d</sup> (95% CI <sup>e</sup> )	Used a condom at last sex <sup>b</sup> Model 2 (n = 441) aOR <sup>d</sup> (95% CI <sup>e</sup> )	Prevention programme reach <sup>c</sup> Model 3 (n = 441) aOR <sup>d</sup> (95% CI <sup>e</sup> )
Age <sup>f</sup>			
18-29	1.0	1.0	1.0
30-44	0.88 (0.32 - 2.37)	0.62 (0.23 - 2.37)	1.63 (0.60 - 4.39)
45+	0.94 (0.24 - 3.65)	0.31 (0.08 - 1.22)	1.60 (0.41 - 6.22)
Completed education <sup>f</sup>			
Grade 6-10	1.0	1.0	1.0
Passed O/L	1.12 (0.47 - 2.70)	2.66 (1.11 - 6.38) *	1.02 (0.42 - 2.44)
Income <sup>f</sup>			
< 30,000	1.0	1.0	1.0

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 441)	Used a condom at last sex <sup>b</sup> Model 2 (n = 441)		Prevention programme reach <sup>c</sup> Model 3 (n = 441)	
30,000+	0.98 (0.41 - 2.32)	0.45 (0.19 - 1.07)		0.42 (0.18 - 1.00)	***
In a relationship <sup>f</sup>	0.61 (0.22 - 1.67)	0.61 (0.22 - 1.69)		2.28 (0.83 - 6.27)	**
Number of paying partners in the past 30 days <sup>g</sup>	0.99 (0.94 - 1.05)	0.98 (0.92 - 1.05)	**	1.02 (0.96 - 1.08)	*
Holds a discriminatory attitude towards PLHIV <sup>f</sup>	0.81 (0.32 - 2.02)	1.0 (0.40 - 2.50)		0.51 (0.21 - 1.28)	**
Used a condom at last sex <sup>f</sup>	2.21 (0.74 - 6.55)	-		0.64 (0.21 - 1.93)	
GARP knowledge of HIV prevention and transmission <sup>f</sup>	1.50 (0.51- 4.44)	1.20 (0.40 - 3.57)		2.15 (0.72 - 6.39)	**
Contact with an NGO or a healthcare provider in the past 3 months <sup>f</sup>	7.23 (2.39 - 21.88)***	1.13 (0.38- 3.36)		-	
Knows HIV status from an HIV test <sup>f</sup>	-	1.84 (0.61 - 5.58)		5.78 (1.95- 17.14)	***

\* $p = .05 - .10$ , \*\* $p = .01 - .05$ , \*\*\* $p < .001 - .01$

Notes. <sup>a</sup> Tested and positive or tested in the past 12 months and negative

<sup>b</sup> Said they used a condom the last time they had sex with a paying partner

<sup>c</sup> Received free condoms in the last 3 months or during the reference week and know where HIV testing can be obtained

<sup>d</sup> Adjusted odds ratio

<sup>e</sup> 95% confidence interval

<sup>f</sup> Categorical predictor

<sup>g</sup> Continuous predictor

## Galle

Factors associated with knowing HIV status from an HIV test, using a condom at last sex with a paying partner, and prevention programme reach were assessed using multivariate logistic regression analysis adjusted for RDS complex sampling design using RDS-Analyst. The results are presented in Table X. Among the socio-demographic factors, age was significantly associated with all three outcomes. Specifically, compared to FSW aged 18-29 years, older FSW were more likely to know their HIV status from and HIV test and to have been reached by the HIV prevention programme, although they were less likely to have used a condom at last sex with a paying partner. Furthermore, FSW who completed higher levels of education and those who had more paying partners in the month before the survey were more likely to have been reached by the HIV prevention programme. Finally, contact with an NGO or a healthcare provider in the past 3 months was significantly and positively associated with knowing HIV status from an HIV test and answering correctly to all five questions about HIV prevention and transmission was significantly and positively associated with using a condom at last sex with a paying partner.

**Table 330: Factors associated with knowing one's HIV status from an HIV test (Model 1), using a condom at last sex (Model 2) and prevention programme reach (Model 3); adjusted for RDS complex sampling design using RDS-Analyst**

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 343) aOR <sup>d</sup> (95% CI <sup>e</sup> )		Used a condom at last sex <sup>b</sup> Model 2 (n = 343) aOR <sup>d</sup> (95% CI <sup>e</sup> )		Prevention programme reach <sup>c</sup> Model 3 (n = 344) aOR <sup>d</sup> (95% CI <sup>e</sup> )	
Age <sup>f</sup>						
18-29	1.0		1.0		1.0	
30-44	2.33 (0.86 - 6.30)	**	0.16 (0.06 - 0.42)	**	1.42 (0.52 - 3.83)	
45+	2.96 (0.76 - 11.49)	**	0.13 (0.03 - 0.51)	***	7.96 (2.05 - 30.94)	***
Completed education <sup>f</sup>						
Grade 6-10	1.0		1.0		1.0	
Passed O/L	0.77 (0.32 - 1.85)		1.81 (0.75 - 4.33)		5.07 (2.11 - 12.17)	***
Income <sup>f</sup>						
< 30,000	1.0		1.0		1.0	
30,000+	1.22 (0.51 - 2.88)		1.55 (0.65 - 3.67)		1.33 (0.56 - 3.15)	
In a relationship <sup>f</sup>	0.84 (0.30 - 2.31)		9.79 (3.56 - 26.96)	***	1.32 (0.48 - 3.64)	
Number of paying partners in the past 30 days <sup>g</sup>	0.98 (0.93 - 1.04)		1.01 (0.96 - 1.07)		1.03 (0.97 - 1.09)	**
Holds a discriminatory attitude towards PLHIV <sup>f</sup>	1.08 (0.43 - 2.69)		-		0.19 (0.07 - 0.57)	***

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 343)		Used a condom at last sex <sup>b</sup> Model 2 (n = 343)		Prevention programme reach <sup>c</sup> Model 3 (n = 344)	
Used a condom at last sex <sup>f</sup>	1.49 (0.50 - 4.41)		-		4.42 (1.49 - 13.11)	**
GARP knowledge of HIV prevention and transmission <sup>f</sup>	1.47 (0.50- 4.37)		8.95 (3.58 - 22.35)	***	0.49 (0.20 - 1.22)	
Contact with an NGO or a healthcare provider in the past 3 months <sup>f</sup>	8.12 (2.68 - 24.58)	***	2.43 (0.94 - 6.30)		-	
Knows HIV status from an HIV test <sup>f</sup>	-		3.53 (1.19 - 10.48)	*	16.41 (6.33 - 42.55)	***

\* $p = .05 - .10$ , \*\* $p = .01 - .05$ , \*\*\* $p < .001 - .01$

Notes. <sup>a</sup> Tested and positive or tested in the past 12 months and negative

<sup>b</sup> Said they used a condom the last time they had sex with a paying partner

<sup>c</sup> Received free condoms in the last 3 months or during the reference week and know where HIV testing can be obtained

<sup>d</sup> Adjusted odds ratio

<sup>e</sup> 95% confidence interval

<sup>f</sup> Categorical predictor

<sup>g</sup> Continuous predictor

### Kandy

Factors associated with knowing HIV status from an HIV test, using a condom at last sex with a paying partner, and prevention programme reach were assessed using multivariate logistic regression analysis adjusted for RDS complex sampling design using RDS-Analyst. The results are presented in Table X. Among socio-demographic factors, age, education and income were associated with using a condom at last sex with a paying partner and only income was associated with knowing HIV status from an HIV test. Specifically, FSW who earned more were less likely to know their HIV status from an HIV test. Compared to FSW ages 18-29 years, FSW aged 45 years and more were less likely to have used a condom at last sex with a paying partner. On the other hand, FSW who completed higher levels of education, those who earned more, and those who were in a relationship were more likely to have used a condom at last sex with a paying partner. FSW who used a condom at last sex with a paying partner were more likely to know their HIV status from an HIV test. Finally, contact with an NGO or a healthcare provider in the past 3 months was significantly and positively associated with knowing HIV status from an HIV test and answering correctly to all five questions about HIV prevention and transmission was significantly and positively associated with both knowing HIV status from an HIV test and with using a condom at last sex with a paying partner.

**Table 331: Factors associated with knowing one's HIV status from an HIV test (Model 1), using a condom at last sex (Model 2) and prevention programme reach (Model 3); adjusted for RDS complex sampling design using RDS-Analyst**

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 318)		Used a condom at last sex <sup>b</sup> Model 2 (n = 318)		Prevention programme reach <sup>c</sup> Model 3 (n = 317)	
	aOR <sup>d</sup> (95% CI <sup>e</sup> )		aOR <sup>d</sup> (95% CI <sup>e</sup> )		aOR <sup>d</sup> (95% CI <sup>e</sup> )	
Age <sup>f</sup>						
18-29	1.0		1.0		1.0	
30-44	1.20 (0.44 - 3.23)		0.70 (0.26 - 1.89)		1.47 (0.54 - 3.96)	
45+	0.61 (0.16 - 2.38)		0.18 (0.05 - 0.69)	***	1.72 (0.44 - 6.68)	
Completed education <sup>f</sup>						
Grade 6-10	1.0		1.0		1.0	
Passed O/L	0.84 (0.35 - 2.02)		2.77 (1.15 - 6.64)	**	0.72 (0.30 - 1.72)	
Income <sup>f</sup>						
< 30,000	1.0		1.0		1.0	
30,000+	0.40 (0.17 - 0.94)	*	2.62 (1.10 - 6.20)	*	2.11 (0.89 - 4.99)	
In a relationship <sup>f</sup>	0.49 (0.18 - 1.34)		2.68 (0.98 - 7.39)	**	0.88 (0.32 - 2.43)	
Number of paying partners in the past 30 days <sup>g</sup>	0.97 (0.91 - 1.03)		1.01 (0.96 - 1.08)		0.99 (0.93 - 1.05)	
Holds a discriminatory attitude towards PLHIV <sup>f</sup>	0.75 (0.29 - 1.95)		0.52 (0.21 - 1.29)		1.89 (0.76 - 4.72)	
Used a condom at last sex <sup>f</sup>	7.72 (3.09 - 19.29)	**	-		1.33 (0.44 - 4.04)	
GARP knowledge of HIV prevention and transmission <sup>f</sup>	5.27 (1.74 - 15.94)	***	7.16 (2.42- 21.21)	***	1.79 (0.60 - 5.31)	
Contact with an NGO or a healthcare provider in the past 3 months <sup>f</sup>	24.22 (8.17- 71.77)	***	0.89 (0.30 - 2.64)		-	
Knows HIV status from an HIV test <sup>f</sup>	-		5.56 (1.84 - 16.82)	**	9.78 (3.30- 28.99)	***

\* $p = .05 - .10$ , \*\* $p = .01 - .05$ , \*\*\* $p < .001 - .01$

Notes. <sup>a</sup> Tested and positive or tested in the past 12 months and negative

<sup>b</sup> Said they used a condom the last time they had sex with a paying partner

<sup>c</sup> Received free condoms in the last 3 months or during the reference week and know where HIV testing can be obtained

<sup>d</sup> Adjusted odds ratio  
<sup>f</sup> Categorical predictor

<sup>e</sup> 95% confidence interval  
<sup>g</sup> Continuous predictor

## 4.2 MSM

### Anuradhapura

Factors associated with knowing HIV status from an HIV test, using a condom at last sex with a casual partner, and prevention programme reach were assessed using multivariate logistic regression analysis adjusted for RDS complex sampling design using RDS-Analyst. The results are presented in Table X. Among the socio-demographic factors included in the models, age was significantly associated with knowing HIV status from an HIV test and prevention programme reach. Specifically, compared to MSM aged 18-29 years, those aged 30-44 years were less likely to know their HIV status from an HIV test, but more likely to have been reached by the HIV prevention programme. Being in a relationship was associated with knowing HIV status from an HIV test and using a condom at last sex with a casual partner. MSM in relationships were less likely to know their HIV status from an HIV test and more likely to have used a condom at last sex with a casual partner. Number of partners in the six months before the survey was also positively associated with both knowing HIV status from an HIV test and HIV prevention programme reach. MSM who used a condom at last sex were much more likely to have been reached by the HIV prevention programme. MSM who answered correctly to all five questions about HIV prevention and transmission were more likely to have used a condom at last sex with a casual partner and they were more likely to have been reached by the HIV prevention programme. Finally, MSM who were in contact with an NGO or a healthcare provider in the three months before the survey were more likely to know their HIV status from an HIV test and they were more likely to have used a condom at last sex with a casual partner.

**Table 332: Factors associated with knowing one’s HIV status from an HIV test (Model 1), using a condom at last sex (Model 2) and prevention programme reach (Model 3); adjusted for RDS complex sampling design using RDS-Analyst**

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 349)		Used a condom at last sex <sup>b</sup> Model 2 (n = 349)		Prevention programme reach <sup>c</sup> Model 3 (n = 349)
	aOR <sup>d</sup> (95% CI <sup>e</sup> )		aOR <sup>d</sup> (95% CI <sup>e</sup> )		aOR <sup>d</sup> (95% CI <sup>e</sup> )
Age <sup>f</sup>					
18-29	1.0		1.0		1.0
30-44	0.26 (0.10 - 0.70)	**	0.79 (0.29 - 2.14)		2.19 (0.81 - 5.92)
45+	0.29 (0.07 - 1.12)		0.53 (0.14 - 2.07)		1.80 (0.46 - 7.01)
Completed education <sup>f</sup>					
Grade 6-10	1.0		1.0		1.0
Passed O/L	0.95 (0.40 - 2.29)		1.29 (0.54 - 3.09)		1.57 (0.65 - 3.76)

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 349)		Used a condom at last sex <sup>b</sup> Model 2 (n = 349)		Prevention programme reach <sup>c</sup> Model 3 (n = 349)
Income <sup>f</sup>					
< 30,000	1.0		1.0		1.0
30,000+	1.48 (0.62 - 3.51)		1.15 (0.48 - 2.72)		0.88 (0.37 - 2.10)
In a relationship <sup>f</sup>	0.19 (0.07 - 0.51)	**	1.23 (0.45 - 3.39)	**	1.40 (0.51 - 3.86)
Number of partners in the past 6 months <sup>g</sup>	1.19 (1.12 - 1.26)	*	1.14 (1.07 - 1.26)		1.14 (1.07 - 1.21)
Holds a discriminatory attitude towards PLHIV <sup>f</sup>	0.63 (0.25 - 1.58)		0.92 (0.37 - 2.29)		0.54 (0.22 - 1.35)
Used a condom at last sex <sup>f</sup>	0.30 (0.10 - 0.88)		-		7.44 (2.46 - 22.52)
GARP knowledge of HIV prevention and transmission <sup>f</sup>	0.48 (0.16 - 1.43)		2.02 (0.68 - 6.00)	*	2.04 (0.69 - 6.05)
Contact with an NGO or a healthcare provider in the past 3 months <sup>f</sup>	4.68 (1.55 - 14.15)	*	6.96 (2.35 - 20.62)	***	-
Knows HIV status from an HIV test <sup>f</sup>	-		0.28 (0.09 - 0.86)		3.65 (1.23 - 10.82)

\* $p = .05 - .10$ , \*\* $p = .01 - .05$ , \*\*\* $p < .001 - .01$

Notes. <sup>a</sup> Tested and positive or tested in the past 12 months and negative

<sup>b</sup> Said they used a condom the last time they had sex with a casual partner, of those who have had sex with such a partner in the past 6 months

<sup>c</sup> Received free condoms in the last 3 months or during the reference week and know where HIV testing can be obtained

<sup>d</sup> Adjusted odds ratio

<sup>e</sup> 95% confidence interval

<sup>f</sup> Categorical predictor

<sup>g</sup> Continuous predictor

## Colombo

Factors associated with knowing HIV status from an HIV test, using a condom at last sex with a casual partner, and prevention programme reach were assessed using multivariate logistic regression analysis adjusted for RDS complex sampling design using RDS-Analyst. The results are presented in Table X. Among socio-demographic factors, age and income were significantly associated only with prevention programme reach. Specifically, compared to MSM aged between 18 and 29 years, MSM aged 30-44 years were less likely to have been reached by the IV prevention programme. MSM who earned more were less likely, and MSM in a relationship were more likely to have been reached by the HIV prevention programme. Number of partners in the six months before the survey was associated only with using a condom at last sex with a casual partner. MSM who had more partners in the past six months

were more likely to have used a condom at last sex with a casual partner. Finally, MSM who answered correctly to all five questions about HIV prevention and transmission were more likely to know their HIV status from an HIV test. Overall, knowing HIV status from an HIV test was related to both using a condom at last sex with a casual partner and to prevention programme reach.

**Table 333. Factors associated with knowing one's HIV status from an HIV test (Model 1), using a condom at last sex (Model 2) and prevention programme reach (Model 3); adjusted for RDS complex sampling design using RDS-Analyst**

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 336) aOR <sup>d</sup> (95% CI <sup>e</sup> )		Used a condom at last sex <sup>b</sup> Model 2 (n = 336) aOR <sup>d</sup> (95% CI <sup>e</sup> )		Prevention programme reach <sup>c</sup> Model 3 (n = 336) aOR <sup>d</sup> (95% CI <sup>e</sup> )	
Age <sup>f</sup>						
18-29	1.0		1.0		1.0	
30-44	1.18 (0.44 - 3.18)		1.81 (0.67 - 4.89)		0.43 (0.16 - 1.17)	**
45+	0.90 (0.23 - 3.50)		1.81 (0.47 - 7.03)		0.65 (0.17 - 2.51)	
Completed education <sup>f</sup>						
Grade 6-10	1.0		1.0		1.0	
Passed O/L	1.06 (0.44 - 2.54)		0.94 (0.39 - 2.25)		0.74 (0.31 - 1.77)	
Income <sup>f</sup>						
< 30,000	1.0		1.0		1.0	
30,000+	1.46 (0.62 - 3.47)		1.00 (0.42 - 2.38)		0.36 (0.15 - 0.85)	***
In a relationship <sup>f</sup>	1.28 (0.46 - 3.52)		0.49 (0.18 - 1.34)		2.04 (0.74 - 5.62)	*
Number of partners in the past 6 months <sup>g</sup>	0.99 (0.94 - 1.05)		1.12 (1.06 - 1.19)	***	0.97 (0.91 - 1.02)	
Holds a discriminatory attitude towards PLHIV <sup>f</sup>	0.74 (0.29 - 1.93)		0.38 (0.15 - 0.94)		0.59 (0.23 - 1.54)	
Used a condom at last sex <sup>f</sup>	11.10 (4.44 - 27.72)	***	-		2.33 (0.93 - 5.82)	
GARP knowledge of HIV prevention and transmission <sup>f</sup>	2.19 (0.72 - 6.63)	*	1.61 (0.54- 4.77)		0.51 (0.17- 1.50)	
Contact with an NGO or a healthcare provider in the past 3 months <sup>f</sup>	19.40 (6.55 - 57.50)	***	2.41 (0.81 - 7.15)		-	

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 336)	Used a condom at last sex <sup>b</sup> Model 2 (n = 336)		Prevention programme reach <sup>c</sup> Model 3 (n = 336)	
Knows HIV status from an HIV test <sup>f</sup>	-	10.77 (3.56 - 32.58)	***	13.03 (4.31 - 39.42)	***

\* $p = .05 - .10$ , \*\* $p = .01 - .05$ , \*\*\* $p < .001 - .01$

Notes. <sup>a</sup> Tested and positive or tested in the past 12 months and negative

<sup>b</sup> Said they used a condom the last time they had sex with a casual partner, of those who have had sex with such a partner in the past 6 months

<sup>c</sup> Received free condoms in the last 3 months or during the reference week and know where HIV testing can be obtained

<sup>d</sup> Adjusted odds ratio

<sup>e</sup> 95% confidence interval

<sup>f</sup> Categorical predictor

<sup>g</sup> Continuous predictor

### Galle

Factors associated with knowing HIV status from an HIV test, using a condom at last sex with a casual partner, and prevention programme reach were assessed using multivariate logistic regression analysis adjusted for RDS complex sampling design using RDS-Analyst. The results are presented in Table X. Among socio-demographic factors, education and income were significantly associated with the outcomes. Specifically, MSM who earned more were more likely to have used a condom at last sex with a casual partner. MSM who completed higher levels of education were less likely to know their HIV status from an HIV test and they were more likely to have been reached by the HIV prevention programme. Number of partners in the six months before the survey was associated only with using a condom at last sex with a casual partner. MSM who had more partners in the past six months were less likely to have used a condom at last sex with a casual partner. Finally, MSM who hold a discriminatory attitude towards PLHIV were more likely to have used a condom at last sex with a casual partner and they were less likely to have been reached by the HIV prevention programme. Finally, MSM who know their HIV status from an HIV test were more likely to have been reached by the HIV prevention programme.

**Table 334: Factors associated with knowing one's HIV status from an HIV test (Model 1), using a condom at last sex (Model 2) and prevention programme reach (Model 3); adjusted for RDS complex sampling design using RDS-Analyst**

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 259) aOR <sup>d</sup> (95% CI <sup>e</sup> )		Used a condom at last sex <sup>b</sup> Model 2 (n = 259) aOR <sup>d</sup> (95% CI <sup>e</sup> )		Prevention programme reach <sup>c</sup> Model 3 (n = 259) aOR <sup>d</sup> (95% CI <sup>e</sup> )	
Age <sup>f</sup>						
18-29	1.0		1.0		1.0	
30+	0.66 (0.24 - 1.78)		0.62 (0.23 - 1.66)		0.60 (0.22 - 1.62)	
Completed education <sup>f</sup>						
Grade 6-10	1.0		1.0		1.0	
Passed O/L	0.43 (0.11 - 1.69)	**	0.37 (0.10 - 1.44)		4.58 (1.18 - 17.82)	***
Income <sup>f</sup>						
< 30,000	1.0		1.0		1.0	
30,000+	1.23 (0.51 - 2.95)		7.18 (2.99 - 17.24)	**	0.62 (0.26 - 1.48)	
In a relationship <sup>f</sup>	0.61 (0.26 - 1.45)		0.92 (0.39 - 2.19)		1.71 (0.72 - 4.07)	
Number of partners in the past 6 months <sup>g</sup>	0.98 (0.92 - 1.04)		0.96 (0.91 - 1.02)	*	0.98 (0.92 - 1.04)	
Holds a discriminatory attitude towards PLHIV <sup>f</sup>	2.34 (0.94 - 5.84)		3.98 (1.45 - 10.96)	*	0.13 (0.05 - 0.36)	***
Used a condom at last sex <sup>f</sup>	3.51 (1.27 - 9.65)	*	-		1.65 (0.56- 4.89)	
GARP knowledge of HIV prevention and transmission <sup>f</sup>	1.33 (0.45 - 3.96)		1.25 (0.48 - 3.25)		0.51 (0.20 - 1.33)	
Contact with an NGO or a healthcare provider in the past 3 months <sup>f</sup>	4.83 (1.63- 14.31)		0.69 (0.23 - 2.06)		-	
Knows HIV status from an HIV test <sup>f</sup>	-		2.68 (0.90- 7.93)		17.58 (5.92 - 52.18)	***

\* $p = .05 - .10$ , \*\* $p = .01 - .05$ , \*\*\* $p < .001 - .01$

Notes. <sup>a</sup> Tested and positive or tested in the past 12 months and negative

<sup>b</sup> Said they used a condom the last time they had sex with a casual partner, of those who have had sex with such a partner in the past 6 months

<sup>c</sup> Received free condoms in the last 3 months or during the reference week and know where HIV testing can be obtained

<sup>d</sup> Adjusted odds ratio

<sup>e</sup> 95% confidence interval

<sup>f</sup> Categorical predictor

<sup>g</sup> Continuous predictor

### 4.3 PWID

#### Colombo

Factors associated with knowing HIV status from an HIV test, using a sterile needle and syringe at last injection, and prevention programme reach were assessed using multivariate logistic regression analysis adjusted for RDS complex sampling design using RDS-Analyst. The results are presented in Table X. Among socio-demographic factors, age was significantly associated with knowing HIV status from an HIV test and education and income were significantly associated with using a sterile needle and syringe at last injection. Specifically, compared to PWID aged 18-29, those aged 45 and above were more likely to know their HIV status from an HIV test. On the other hand, PWID who completed higher levels of education and those who earn more were less likely to have used a sterile needle and syringe at last injection. PWID who had more partners in the past 12 months and those who used a condom at last sex were more likely to know their HIV status from an HIV test. Finally, PWID who hold a discriminatory attitude towards PLHIV were less likely, and those who know their HIV status from an HIV test were more likely to have been reached by the HIV prevention programme.

**Table 335: Factors associated with knowing one's HIV status from an HIV test (Model 1), using sterile needle and syringe at last injection (Model 2) and prevention programme reach (Model 3); adjusted for RDS complex sampling design using RDS-Analyst**

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 278) aOR <sup>d</sup> (95% CI <sup>e</sup> )		Used sterile needle and syringe at last injection <sup>b</sup> Model 2 (n = 278) aOR <sup>d</sup> (95% CI <sup>e</sup> )		Prevention programme reach <sup>c</sup> Model 3 (n = 282) aOR <sup>d</sup> (95% CI <sup>e</sup> )
Age <sup>f</sup>					
18-29	1.0		1.0		1.0
30-44	2.02 (0.75 - 5.74)		0.89 (0.33 - 2.41)		5.79 (2.14 - 15.66)
45+	4.87 (1.25 - 18.92)	**	0.78 (0.20 - 3.05)		6.53 (1.68 - 25.40)
Completed education <sup>f</sup>					
Grade 6-10	1.0		1.0		1.0
Passed O/L	1.63 (0.68 - 3.90)		0.42 (0.18 - 1.01)	**	0.52 (0.22 - 1.26)
Income <sup>f</sup>					
< 30,000	1.0		1.0		1.0
30,000+	0.51 (0.21 - 1.20)		0.23 (0.10 - 0.56)	***	0.58 (0.24 - 1.37)
In a relationship <sup>f</sup>	1.40 (0.51 - 3.85)		0.52 (0.19 - 1.44)		2.38 (0.86 - 6.55)
Number of partners in the past 12 months <sup>g</sup>	1.02 (0.96 - 1.08)	*	1.00 (0.95 - 1.06)		1.00 (0.95 - 1.06)

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 278)		Used sterile needle and syringe at last injection <sup>b</sup> Model 2 (n = 278)	Prevention programme reach <sup>c</sup> Model 3 (n = 282)	
Holds a discriminatory attitude towards PLHIV <sup>f</sup>	0.61 (0.20 - 1.85)		0.66 (0.22- 1.96)	0.25 (0.09- 0.75)	**
Used sterile needle and syringe at last injection <sup>f</sup>	0.50 (0.17- 1.49)		-	2.90 (1.25 - 6.73)	
Did not use a condom at last sex <sup>f</sup>	0.03 (0.01 - 0.08)	***	1.54 (0.62 - 3.84)	0.33 (0.13 - 0.83)	
GARP knowledge of HIV prevention and transmission <sup>f</sup>	0.79 (0.27 -2.35)		1.06 (0.36 -3.14)	1.52 (0.51 -4.52)	
Contact with an NGO or a healthcare provider in the past 3 months <sup>f</sup>	2.63 (1.13 - 6.10)		1.18 (0.08 - 16.90)	-	
Knows HIV status from an HIV test <sup>f</sup>	-		0.44 (0.19 - 1.03)	4.45 (0.31 - 63.68)	**

\* $p = .05 - .10$ , \*\* $p = .01 - .05$ , \*\*\* $p < .001 - .01$

Notes. <sup>a</sup> Tested and positive or tested in the past 12 months and negative

<sup>b</sup> Said they used sterile needle and syringe the last time they injected drugs

<sup>c</sup> Received free condoms in the last 3 months or during the reference week and know where HIV testing can be obtained

<sup>d</sup> Adjusted odds ratio

<sup>e</sup> 95% confidence interval

<sup>f</sup> Categorical predictor

<sup>g</sup> Continuous predictor

### 4.3 BEACH BOYS

#### Galle

Factors associated with knowing HIV status from an HIV test, using a condom at last sex with a casual partner, and prevention programme reach were assessed using multivariate logistic regression analysis adjusted for RDS complex sampling design using RDS-Analyst. The results are presented in Table X. Across the three models, only education was related to all three key outcomes. Specifically, beach boys who completed higher levels of education were less likely to know their HIV status from an HIV test, they were more likely to have used a condom at last sex with a casual partner and they were more likely to have been reached by the HIV prevention programme. With regard to other socio-demographic factors, age was associated only with condom use. Compared to beach boys aged 18 to 24 years, those aged 45 years or above were less likely to have used a condom at last sex with a casual partner. Income was found to be associated with both knowing HIV status from an HIV test and prevention programme reach. Beach boys who earned more were less likely to know their HIV status from an HIV test, although they were more likely to have been reached by HIV prevention programmes. With regard to behavioural indicators, number of partners in the year before the survey and using a condom at last sex with a casual partner were associated with knowing HIV status from an HIV test. Those beach boys who had more partners and those who used a condom at last sex with a casual partner were more likely to know their HIV status from an HIV test. In addition, beach boys who hold a discriminatory attitude towards PLHIV were more likely to know their HIV status from an HIV test and they were less likely to have been reached by the HIV prevention programme. Finally, GARP knowledge of HIV prevention and transmission was related to both knowing HIV status from an HIV test and to using a condom at last sex with a casual partner. Those beach boys who answered correctly to all five questions about HIV prevention and transmission were more likely to know their HIV status from an HIV test and they were more likely to have used a condom at last sex with a casual partner. Finally, beach boys who have been in contact with an NGO or a healthcare provider in the 3 months before the survey were also more likely to know their HIV status from an HIV test.

**Table 336: Factors associated with knowing one's HIV status from an HIV test (Model 1), using a condom at last sex (Model 2) and prevention programme reach (Model 3); adjusted for RDS complex sampling design using RDS-Analyst**

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 324)	Used a condom at last sex <sup>b</sup> Model 2 (n = 303)	Prevention programme reach <sup>c</sup> Model 3 (n = 324)
	aOR <sup>d</sup> (95% CI <sup>e</sup> )	aOR <sup>d</sup> (95% CI <sup>e</sup> )	aOR <sup>d</sup> (95% CI <sup>e</sup> )
Age <sup>f</sup>			
18-29	1.0	1.0	1.0
30-44	1.42 (0.52 - 3.83)	0.99 (0.37 - 2.68)	1.47 (0.54 - 3.97)
45+	2.39 (0.62 - 9.30)	0.38 (0.10 - 1.49)	0.48 (0.12 - 1.89)

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 324)		Used a condom at last sex <sup>b</sup> Model 2 (n = 303)		Prevention programme reach <sup>c</sup> Model 3 (n = 324)	
Completed education <sup>f</sup>						
Grade 6-10	1.0		1.0		1.0	
Passed O/L	0.25 (0.11 - 0.61)	***	2.49 (1.04 - 5.99)	**	5.29 (2.21 - 12.70)	***
Income <sup>f</sup>						
< 30,000	1.0		1.0		1.0	
30,000+	0.46 (0.19 - 1.09)	*	1.03 (0.43 - 2.45)		2.32 (0.98 - 5.50)	*
In a relationship <sup>f</sup>	0.80 (0.29 - 2.20)		0.74 (0.27 - 2.05)		0.73 (0.27 - 2.01)	
Number of partners in the past 12 months <sup>g</sup>	1.07 (1.01 - 1.13)	**	1.09 (1.03 - 1.15)		1.0 (0.94 - 1.06)	
Ever had sex with a man <sup>f</sup>	1.48 (0.59 - 3.71)		0.81 (0.33 - 2.03)		1.06 (0.42 - 2.64)	
Ever received money, goods or services in exchange for sex <sup>f</sup>	0.89 (0.34 - 2.30)		1.49 (0.57 - 3.86)		1.40 (0.54 - 3.64)	
Holds a discriminatory attitude towards PLHIV <sup>f</sup>	4.41 (1.49 - 13.09)	***	0.71 (0.24 - 2.12)		0.09 (0.03 - 0.27)	***
Used a condom at last sex <sup>f</sup>	7.52 (2.49 - 22.77)	***	-		0.71 (0.30 - 1.64)	
GARP knowledge of HIV prevention and transmission <sup>f</sup>	3.68 (1.59 - 8.56)	***	3.42 (1.13 - 10.36)	***	2.12 (0.70 - 6.41)	
Contact with an NGO or a healthcare provider in the past 3 months <sup>f</sup>	42.61 (12.99 - 139.82)	***	0.64 (0.04 - 9.14)		-	
Knows HIV status from an HIV test <sup>f</sup>	-		6.51 (2.80 - 15.13)	***	97.15 (6.79 - 1389.43)	***

\* $p = .05 - .10$ , \*\* $p = .01 - .05$ , \*\*\* $p < .001 - .01$

Notes. <sup>a</sup> Tested and positive or tested in the past 12 months and negative

<sup>b</sup> Said they used a condom the last time they had sex with a non-marital, non-cohabiting partner, of those who have had sex with such a partner in the last 12 months

<sup>c</sup> Received free condoms in the last 3 months or during the reference week and know where HIV testing can be obtained

<sup>d</sup> Adjusted odds ratio

<sup>e</sup> 95% confidence interval

<sup>f</sup> Categorical predictor

<sup>g</sup> Continuous predictor

## 4.5 TG Women

### Colombo

Factors associated with knowing HIV status from an HIV test, using a condom at last sex with a casual partner, and prevention programme reach were assessed using multivariate logistic regression analysis adjusted for RDS complex sampling design using RDS-Analyst. The results are presented in Table X. Age was associated with all three outcomes. Specifically, compared to TG women aged 18-29, older TG women were more likely to know their HIV status from an HIV test, and they were less likely to have either used a condom at last sex with a casual partner or to have been reached by the HIV prevention programme. TG women who completed higher levels of education and those who know their HIV status from an HIV test were more likely to have been reached by the HIV prevention programme. TG women who earned more, however, were less likely to have been reached by the HIV prevention programme. Finally, TG women who earned more and those who were in contact with an NGO or a healthcare provider in the past 3 months were more likely to know their HIV status from an HIV test.

**Table 337: Factors associated with knowing one's HIV status from an HIV test (Model 1), using a condom at last sex (Model 2) and prevention programme reach (Model 3); adjusted for RDS complex sampling design using RDS-Analyst**

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 242)		Used a condom at last sex <sup>b</sup> Model 2 (n = 242)		Prevention programme reach <sup>c</sup> Model 3 (n = 242)	
	aOR <sup>d</sup> (95% CI <sup>e</sup> )		aOR <sup>d</sup> (95% CI <sup>e</sup> )		aOR <sup>d</sup> (95% CI <sup>e</sup> )	
Age <sup>f</sup>						
18-29	1.0		1.0		1.0	
30+	1.87 (0.69 - 5.05)	*	0.37 (0.14 - 0.99)	**	0.30 (0.11 - 0.82)	***
Completed education <sup>f</sup>						
Grade 6-10	1.0		1.0		1.0	
Passed O/L	0.60 (0.15 - 2.33)		2.32 (0.60 - 9.01)		2.34 (0.60 - 9.09)	*
Income <sup>f</sup>						
< 30,000	1.0		1.0		1.0	
30,000+	4.34 (1.81 - 10.42)	***	1.72 (0.72 - 4.13)		0.29 (0.12 - 0.69)	**
In a relationship <sup>f</sup>	1.81 (0.76 - 4.29)		1.00 (0.42 - 2.38)		1.58 (0.67 - 3.76)	
Number of partners in the past 6 months <sup>g</sup>	1.02 (0.96 - 1.08)		1.02 (0.96 - 1.08)		0.97 (0.92 - 1.03)	
Holds a discriminatory attitude towards PLHIV <sup>f</sup>	1.09 (0.44 - 2.73)		0.62 (0.22 - 1.70)		0.78 (0.28 - 2.15)	
Used a condom at last sex <sup>f</sup>	1.51 (0.55 - 4.16)		-		1.69 (0.57- 4.99)	



**Table 338: Factors associated with knowing one's HIV status from an HIV test (Model 1), using a condom at last sex (Model 2) and prevention programme reach (Model 3); adjusted for RDS complex sampling design using RDS-Analyst**

	Knows HIV status from an HIV test <sup>a</sup> Model 1 (n = 239)		Used a condom at last sex <sup>b</sup> Model 2 (n = 239)		Prevention programme reach <sup>c</sup> Model 3 (n = 240)	
	aOR <sup>d</sup> (95% CI <sup>e</sup> )		aOR <sup>d</sup> (95% CI <sup>e</sup> )		aOR <sup>d</sup> (95% CI <sup>e</sup> )	
Age <sup>f</sup>						
18-29	1.0		1.0		1.0	
30+	0.36 (0.13 - 0.97)		0.52 (0.19 - 1.40)	*	1.89 (0.70 - 5.11)	*
Completed education <sup>f</sup>						
Grade 6-10	1.0		1.0		1.0	
Passed O/L	0.30 (0.08 - 1.15)		0.92 (0.24 - 3.57)		2.40 (0.62 - 9.33)	*
Income <sup>f</sup>						
< 20,000	1.0		1.0		1.0	
20,000+	3.97 (0.12 - 0.69)	**	0.93 (0.39 - 2.23)		1.41 (0.59 - 3.37)	
In a relationship <sup>f</sup>	2.78 (1.17 - 6.60)		0.78 (0.33 - 1.85)		0.73 (0.31 - 1.74)	
Number of partners in the past 6 months <sup>g</sup>	1.02 (0.96 - 1.08)		1.02 (0.96 - 1.08)		0.95 (0.89 - 1.00)	***
Holds a discriminatory attitude towards PLHIV <sup>f</sup>	6.62 (2.65 - 16.53)	***	4.88 (1.77 - 13.43)	***	1.05 (0.38 - 2.88)	
Used a condom at last sex <sup>f</sup>	0.53 (0.19 - 1.46)		-		2.29 (0.77 - 6.79)	**
GARP knowledge of HIV prevention and transmission <sup>f</sup>	6.93 (2.34 - 20.55)	***	2.14 (0.72 - 6.35)	*	3.48 (1.34 - 9.03)	***
Contact with an NGO or a healthcare provider in the past 3 months <sup>f</sup>	24.39 (8.22 - 72.41)	***	4.46 (1.72 - 11.56)	***	-	
Knows HIV status from an HIV test <sup>f</sup>	-		0.47 (0.16 - 1.38)		17.98 (6.06 - 53.39)	***

\* $p = .05 - .10$ , \*\* $p = .01 - .05$ , \*\*\* $p < .001 - .01$

Notes. <sup>a</sup> Tested and positive or tested in the past 12 months and negative

<sup>b</sup> Said they used a condom the last time they had sex with a casual partner, of those who have had sex with such a partner in the past 6 months

<sup>c</sup> Received free condoms in the last 3 months or during the reference week and know where HIV testing can be obtained

<sup>d</sup> Adjusted odds ratio    <sup>e</sup> 95% confidence interval

<sup>f</sup> Categorical predictor

<sup>g</sup> Continuous predict

## 4. Discussion

### Discussion of key findings for FSW

- Although most of FSW have a source of income other than sex work, the majority earn less than 30,000 Sri Lankan Rupees per month (194 USD), specifically 76.3%, 72.4% and 75.7% in Colombo, Galle and Kandy, respectively. According to the World Bank data for 2016, gross national income per capita in Sri Lanka 3,850 USD. Similarly, compared to the general population in Sri Lanka, among which 10.4% in 2011 were living at 5.50 USD per day, the majority of FSW in Kandy are likely living in poverty. In accordance with the UNAIDS and UNFPA Sex Worker Implementation Tool (SWIT), looking at economic opportunities, education, and general quality of life is an important component of FSW programming. Furthermore, in alignment with the Sustainable Development Goals, reduction of poverty is an important goal, and interlinked with health and social development.<sup>21,22,23</sup>
- Among FSW in Kandy who have heard of HIV/AIDS, most have never discussed HIV/AIDS with any of their partners (41.6%, 65.4% and 52.1% in Colombo, Galle and Kandy). There is rationale for inclusion of intimate partner awareness within targeted messaging and BCC tools.
- Only a third of FSW have received an HIV test within 12 months before the survey was carried out (17.5% in Colombo, 39.5% in Galle and 17.5% in Kandy). This GAM testing indicator remains low and should be a focus of all aspects of prevention efforts through multiple channels (e.g. outreach, BCC, awareness raising/media, etc.).
- The mean age of respondents the first time they had sex ranged was 18, 19 and 21, in Colombo, Galle and Kandy, respectively. Between a quarter to a half were under the age of 18 the first time they had vaginal sex. Furthermore, in Colombo and Kandy their first partners were on average almost ten years older than them, while this was only 5 years in Galle. This finding of an older first sexual partner aligns with the previous IBBS survey, and the NSACP and stakeholders should discuss how this finding could be integrated into prevention efforts.
- Condom usage was highest in Galle, where 69.4% of FSW consistently used condoms over the last month, and 86.6% used condoms at last sex with a paying client, in comparison with Colombo and Kandy where these indicators were 34.2% and 92.2% (Colombo) and 26.9% and 57.1% (Kandy). The main reasons for not using condoms were never having heard of a condom and partner objecting to using a condom, as well as not using a condom because they do not think it is necessary. These findings indicate that in addition to testing, increased condom awareness and negotiation is crucial to reduce transmission.
- Health seeking behaviour amongst FSW in general is low, with only 15.9% (Galle), 22.5% (Colombo) and 36.9% (Kandy) of FSW in the year preceding the survey seeing medical care. Of

---

<sup>21</sup>[http://databank.worldbank.org/data/views/reports/reportwidget.aspx?Report\\_Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=LKA](http://databank.worldbank.org/data/views/reports/reportwidget.aspx?Report_Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=LKA)

<sup>22</sup> <http://databank.worldbank.org/data/reports.aspx?source=poverty-and-equity&Type=TABLE&preview=on>

<sup>23</sup> <https://www.unfpa.org/publications/implementing-comprehensive-hivsti-programmes-sex-workers-practical-approaches>

these, FSW in Colombo (36.1%) reports more difficulty than those in Galle (2.3%) and Kandy (2.0%). Many FSW have been pregnant in their lives (57.7% in Colombo, 74.3% in Galle and 40.9% in Kandy), but less than half across all three sites sought ANC care (41.6%, 40.04% and 40.1%, in Colombo, Galle and Kandy, respectively).

- Among FSW in Kandy who had ever tested for HIV, almost all (80.4%, 89.2% and 85.1% in Colombo, Galle and Kandy) told their counsellor/health care provider that they exchange sex for money at their last HIV testing. This finding shows strength of training for healthcare providers, an area where NSACP and the MoH had previously invested resources.
- Sexual violence against FSW is prevalent, with 10.9%, and 15.5% in Colombo and Kandy having been sexually assaulted or raped, while this was much lower in Galle at 1.2%. Following the sexual assault/rape, few FSW in had sought medical treatment and none reported it to the police (22.3% in Colombo, 1.1% in Kandy and 0% in Galle). This is exceptionally low, therefore outreach, BCC and peer support efforts should consider incorporating, if not already, case management of rape and reporting, or a higher emphasis if already incorporated.
- Regarding media use, FSW most frequently watch TV or listen to the radio, most days or every day. Very few read the newspaper or use the Internet (never: 75.1%). Finally, most FSW have mobile phones, therefore the mobile phone remains the predominant ways to raise awareness and reach FSW. These findings are similar to the previous IBBS survey in 2014/5, where it was recommended that interventions promoting mobile phone are incorporated into HIV prevention strategies.

### Discussion of key findings for MSM

- Approximately a quarter of MSM in Sri Lanka have never heard of HIV/AIDS (26.7% in Colombo, 28.3% in Galle, and 18.6% in Anuradhapura). This is concerning given multipronged and multi-stakeholder efforts for HIV awareness raising in both general and KPs.
- Personal perceived risk of HIV varies, with MSM in Anuradhapura (85.2%), followed by Galle (75.2%) and then Colombo (28.6%) perceiving their risk of HIV as low or none. Higher perceived risk mainly relates to condom use, which is high. The noticeable difference between Colombo and the others sites is not clear.
- Knowledge about HIV prevention is somewhat low amongst MSM in Sri Lanka, with between one in five and three in five MSM not being able to correctly identify misconceptions (19.5% in Colombo, 49.3% in Galle, 59.7% in Anuradhapura). Again, the pattern persists with Colombo trailing behind the other two sides.
- Discrimination is varied, ranging between less than one in five to more than four in five to MSM in Sri Lanka exhibiting a discriminatory attitude towards PLHIV (29.8% in Colombo, 89.2% in Galle and 14.1% in Anuradhapura). Further reinforcing this lack of discussion amongst partners with few having discussed HIV status with partners. This shows the differences in knowledge and awareness, thus indicating different prevention strategies to be employed amongst the MSM community.
- While knowledge of where to receive an HIV test is high (73.8% in Colombo, 68.8% in Galle and 66.2% in Anuradhapura), those who have been for a test in the last 12 months is low (47.2% in Colombo, 45.6% in Galle, 3.6% in Anuradhapura). Further qualitative research into reasons for the discrepancy between knowing where to go, and actually going, could be explored. Also, among

those who ever did receive an HIV test, almost all have received their last HIV test at a government non-STI clinic. Investigation into engagement with the private sector could be explored to close the gap in testing. Among MSM who had never received an HIV test, a majority said it was because they either do not know where to go or because the testing location is inconvenient. Exploration of self-testing to address the gap could be explored.

- Many MSM visit outdoor sites (such as parks, streets, bus stations, etc.) to find partners (67.9% in Colombo, 14.4% in Galle and 67.9% in Anuradhapura) illustrating an opportunity for MSM IEC and BCC, through peer outreach in these locations.
- Sexual networking including casual and regular sexual partners is present, averaging 4.6, 1.6, 1.8 total sexual partners in the previous week, across Colombo, Galle and Anuradhapura, respectively. Very few MSM has no sexual partners in the six months preceding the survey. Many MSM had ever had sex with a woman (34.7% in Colombo, 44.1% in Galle, and 94.9% in Anuradhapura). These findings show large numbers of sexual contacts and networking, therefore if condom usage is not high, opportunities for transmission are high, and prevention efforts will continually be hindered.
- Condom usage at last anal sex with a casual partner is high (82.2% in Colombo, 93.4% in Galle, 68.7% in Anuradhapura) but there is still work to be done, particularly given the interconnected sexual activity, and therefore the message of correct and consistent condom usage should still be a focus of BCC and IEC, to increase.
- Among MSM in Colombo who had ever tested for HIV, a majority (89.0% in Colombo, 96.0% in Galle, and 81.2% in Anuradhapura) told their counsellor/health care provider that they have sex with men at their last HIV testing, showing acceptability amongst healthcare providers.
- The GAM composite indicator on reached by prevention programmes is extremely (given condoms and lubricants and STI test in the last 12 months) with few MSM reached (32.9% in Colombo, 4.7%, in Galle 25.5% in Anuradhapura). Discussion around how to innovate to increase this indicator should be explored.
- Almost all MSM use mobile phones and watch television daily, and frequent internet usage is above 50%, thus these are most apparent methods for accessing the population with information and awareness raising.

### Discussion of key findings for PWID

- Although the majority of PWID in Colombo work at least occasionally (80.3%), they only earn more than 20,000 Sri Lankan Rupees (127 USD) per month (86.7%). According to the World Bank data for 2016, gross national income per capita in Sri Lanka 3,850 USD. Similarly, compared to the general population in Sri Lanka, among which 10.4% in 2011 were living at 5.50 USD per day, the majority of PWID in Colombo are likely living in poverty. Interventions looking at economic opportunities, education, and general quality of life would be recommended for discussion and may encourage active participation in programming.
- Knowledge about HIV prevention is low among PWID in Colombo, with only one in ten (10.7%) PWID able to correctly identify modes of sexual transmission of HIV and reject major misconceptions about transmission HIV. As a key GAM indicator, peer education and outreach should focus on the facts around HIV transmission.
- Only one in three (32.3%) PWID in Colombo know where to receive an HIV test. Furthermore, although 16.7% of PWID in Colombo have ever tested for HIV, as few as 7.7% have received an

HIV test within 12 months before the survey was carried out. Among those who ever did receive an HIV test, most (85.7%) have received their last HIV test at a government non-STI clinic. A major reason for the low uptake of testing is that some believe they are not at risk of HIV (14.2%) or because they trust their partner (13.8%), showing the lack of association with their injecting drug use as a key risk factor, and also the need for a focus on testing in peer education and outreach.

- Most commonly, PWID in Colombo inject drugs either in their own house (61.7%), or in somebody else's house (58.8). About one in five (19.2%) injects drugs in a drug dealer's house. Very few inject drugs in public places, such as in abandoned buildings (20.1%) or in streets/parks/beaches (7.0%), although as many as two-thirds (69.2%) visit outdoor sites (streets, parks, bars) in order to buy drugs and socialize with other PWID. This shows the need for IEC and outreach opportunities in key public places, before PWID retreat for injecting practices in private homes. This may be one of the only catchment points for these programmes. Potential for exploration of IEC and peer outreach through drug suppliers should be explored, despite the major legal implications.
- Slightly fewer than half of PWID did not know or ask about the HIV status of the last person they injected drugs with (41.4%). Breaking the barrier of stigma, increasing discussions around HIV, is necessary, and should be the focus of BCC and outreach.
- PWID in Colombo have on average been arrested four times for injecting drugs or being in possession of drugs. Only one in ten (8.0%) PWID in Colombo has not ever been arrested for injecting drugs or being in possession of drugs. Among PWID who have ever been in jail/prison, few have also injected drugs while in jail/prison (9.5%). Ensuring IEC and clean needles are available in all prison facilities is necessary, despite structural challenges, while also ensuring these opportunities are used to connect PWID with peer educators, before they are potentially lost to this entry point, as they then go onwards to predominantly inject at home.
- Among PWID in Colombo who had ever tested for HIV, a majority (87.3%) have told their counsellor/health care provider at their last HIV testing that they inject drugs. This shows the attitude of healthcare providers in Sri Lanka, providing an enabling environment for PWID disclosure.
- Coverage by HIV prevention programs, defined as receipt of at least two interventions (i.e., Given condoms and lubricant; Counselling on condom use and safe sex; Received new, clean needles or syringes) in the past three months, is low, at 2.7%. This indicator is extremely low, and innovative ways to improve should be explored.
- Regarding media use, PWID in Colombo most frequently watch TV (most days or every day: 88.8%) or listen to the radio (most days or every day: 68.5%). Much fewer read the newspaper (most days or every day: 14.8%) or regularly use the Internet (most days or every day: 8.4%). Finally, fewer than half PWID in Colombo have a mobile phone (42.9%). For IEC, TV and radio will be the most cost effective and high impact media outlets for IEC.
- Finally, four in five PWID in Colombo have ever been in prison for injecting drug use or being in possession of drugs (80.6%). As mentioned previously, using this entry point to provide IEC, and potentially link to a peer educator, despite the structural challenges, is encouraged.

## Discussion of key findings for BB

- A third of BB in Galle have never heard of HIV/AIDS (30.5%), most (85.6%) have never discussed HIV/AIDS with any of their partners, and only a third (38.3%) correctly identify modes of sexual transmission of HIV and reject major misconceptions. These results show the necessity of continual awareness raising and education around HIV.
- Among BB in Galle who have ever heard of HIV/AIDS, more than half (60.5%) exhibit a discriminatory attitude towards PLHIV, illustrating the need for education and awareness to focus on stigma reduction, and that HIV is a long term treatable chronic condition.
- Testing practices amongst BB are low, which is not surprising given the limited awareness. Only one in three (35.3%) of BB in Galle has ever tested for HIV, and only slightly fewer (30.0%) have received an HIV test within 12 months before the survey was carried out. Targeted BCC approaches should encourage HIV testing, and partnerships with the private sector should be explored given reasons for not testing included no time – mobile VCT and/or self-testing should be explored as ways to increase uptake.
- BB in Galle have experience little discrimination from health care providers and police/authorities.
- Sexual behaviour favours sex with females, with almost all BB in Galle having ever had sex with a woman (96.5%) and fewer than one in five (16.0%) having ever had sex with a man.
- Almost all BB in Galle have ever had sex with a tourist (98.6%), and a majority of them have had sex with a tourist in the 12 months preceding the survey (85.5%), with predominantly female (98.3%) rather than male tourists (10.5%).
- At last sex with a tourist, three quarters of BB in Galle used a condom (75.3%). Of those who did not, it was mainly because a condom was not available (51.9%), or because they did not think it was necessary (48.1%) or they did not think of using a condom (38.8%). At last sex with a tourist about one in four (24.4%) BB was paid for sex and for a majority (92.3%), their partner was a woman. Finally, tourists BB have sex with most often come to Sri Lanka from Germany and Russia. Condom distribution and availability amongst locations frequented by BB should be explored. Using multipronged strategies including peer outreach, venue based, health facility based and engagement with the private sector should be explored. Innovation around use of social media and social marketing to increase condom uptake could be explored.
- Nearly a quarter (24.1%) of BB in Galle have been in contact with an NGO (drop-in centre, outreach service) or a healthcare provider in the three months preceding the survey – showing an avenue for awareness and condom distribution, but that this cannot be the only modality. STI testing was low (one in five) in the past three months. Coverage by HIV prevention programs, defined as receipt of at least two interventions (i.e., Given condoms and lubricant; Counselling on condom use and safe sex; Received an STI test) in the past three months, is low, at 14.7%.
- TV and internet are the best media methods to reach BB, and nearly all BB have mobile phones – therefore social mobilization and social marketing should explore these methods of communication.

## Discussion of key findings for TGW

- The majority of TGW have a regular partner and for the majority their partner is a man (99.5% in Colombo and 97.1% in Jaffna). However, despite many TGW having a regular partner, a high reported number of sexual relations in the past week was the norm. In the seven days before the survey, TGW in Colombo and Jaffna had on average four and five sexual partners, respectively. The practice of multiple and concurrent partnerships can increase the risk of HIV, therefore the need for correct and consistent condom usage should be a priority in IEC and BCC provision.
- Condom usage is higher in Colombo than in Jaffna, with more than three quarters of TGW in Colombo using a condom at last anal sex, but the same indicators showing only just over half in Jaffna. Given the extent of HIV prevention programming in Colombo versus in Jaffna, this finding is not surprising.
- Knowledge of HIV is mixed, with around one-fifth of TGW in Colombo and Jaffna having never heard of HIV, showing that outreach needs to be extended beyond the current networks of TGW, that TGWs recruited into the study have not yet been reached by prevention efforts either through general population or KP programming.
- Interestingly, despite TGW potentially living in an environment of high stigma, they themselves highly stigmatize PLHIV, with around a third in Colombo and Jaffna discriminating against PLHIV. This shows that stigma reduction programmes around HIV are necessary. The potential for a stigma index survey should be discussed, to ascertain how and where the stigma originates, to effectively develop appropriate interventions to address the root of stigma in the general and KPs.
- While the majority of TGW know where to obtain an HIV test, few have been for an HIV test in the last 12 months (43.1% in Colombo and 11.5% in Jaffna). Within IEC and BCC interventions, focusing on the importance of testing will be crucial to increase uptake of this important component of HIV prevention and treatment. Location of HIV testing should be explored, as TGW mentioned locations of testing may be inconvenient. Potential partnerships with the private sector, and also potentially outreach and moonlight HCT should be explored, as many TGW meet new partners at outdoor venues.
- The majority of TGWs in both Colombo and Jaffna have received money, goods or services for sex, and the majority in Colombo have given money, goods or services for sex. The number of TGW in Jaffna who have paid for sex is lower than in Colombo. Interestingly, condom use at last transactional sex is high, above 90% in Colombo and slightly lower, between 60-70% in Jaffna. Investigation into the reason for transactional sex should be explored.
- A large proportion of TGWs in both Colombo (86.1%) and Jaffna (49.3%) have received feminizing hormones in the past six months. Among them few had reused needles, but this was higher in Colombo. Nevertheless, it is present, and the reasons should be explored further. If this is a gap in education, then health practitioners should be sensitized to focus on this aspect during consultations and renewals of prescriptions.
- Similar to patterns with other population groups, TV, radio and mobile phone usage are high, while newspaper reading is low, as well as internet usage, clearly showing the preferred methods for peer outreach and provision of IEC.

## Aggregate population estimates, comparisons across districts and GAM indicators

This section provides aggregate estimates for population groups, comparison of finding across districts, and summary of trends of GAM indicators. Changes in GAM (previously called GARP) indicators over the years result in challenges to measuring trends, due to changes to definitions and mode of analysis, and as such some indicators cannot be compared over time.

The table below presents data for FSW across all sites, as well as aggregate estimates for all three sites. Overall, prevalence of HIV and STI remains low amongst FSW with an aggregate prevalence of HIV of 0.24%. Syphilis, however, appears to have increased slightly from 0.98% in 2014/15 to 1.7% in 2018. This difference is negligible and should not be cause for alarm as aggregate estimates have inherent methodological challenges. Furthermore, both in 2014 and in 2017 there were only 7 cases in total. Unlike in the first wave of the survey, when there were cases of syphilis found only in Colombo, in the current survey two cases each were found in Galle and in Kandy – showing some geographical spread.

In terms of behavioral indicators, less than half of all FSW know their HIV status, and this appears to have reduced slightly since that last survey (35.01% in 2014/15 and 29.9% in 2018). Looking at the individual sites shows that knowledge of HIV status decreased in Colombo but increased across Galle and Kandy. Coverage of HIV programmes remains very low, although comparison of trends should be avoided as the GAM definition changed, using the current definition the overall coverage remains at 12.7% (received at least two interventions in the past three months (given condoms and lubricant; counselling on condom use and safe sex; received an STI test). Use of condom at last sex with a client is the best performing behavioral indicator, however this has also decreased since the last survey across all sites, and the aggregate indicator dropped from 93.0% in 2014/15 to 83.6% in 2018. Discriminatory attitudes towards PLHIV and avoidance of HIV services due to stigma, both new GAM indicators remain a concern, 56.6% and 42.4%, respectively.

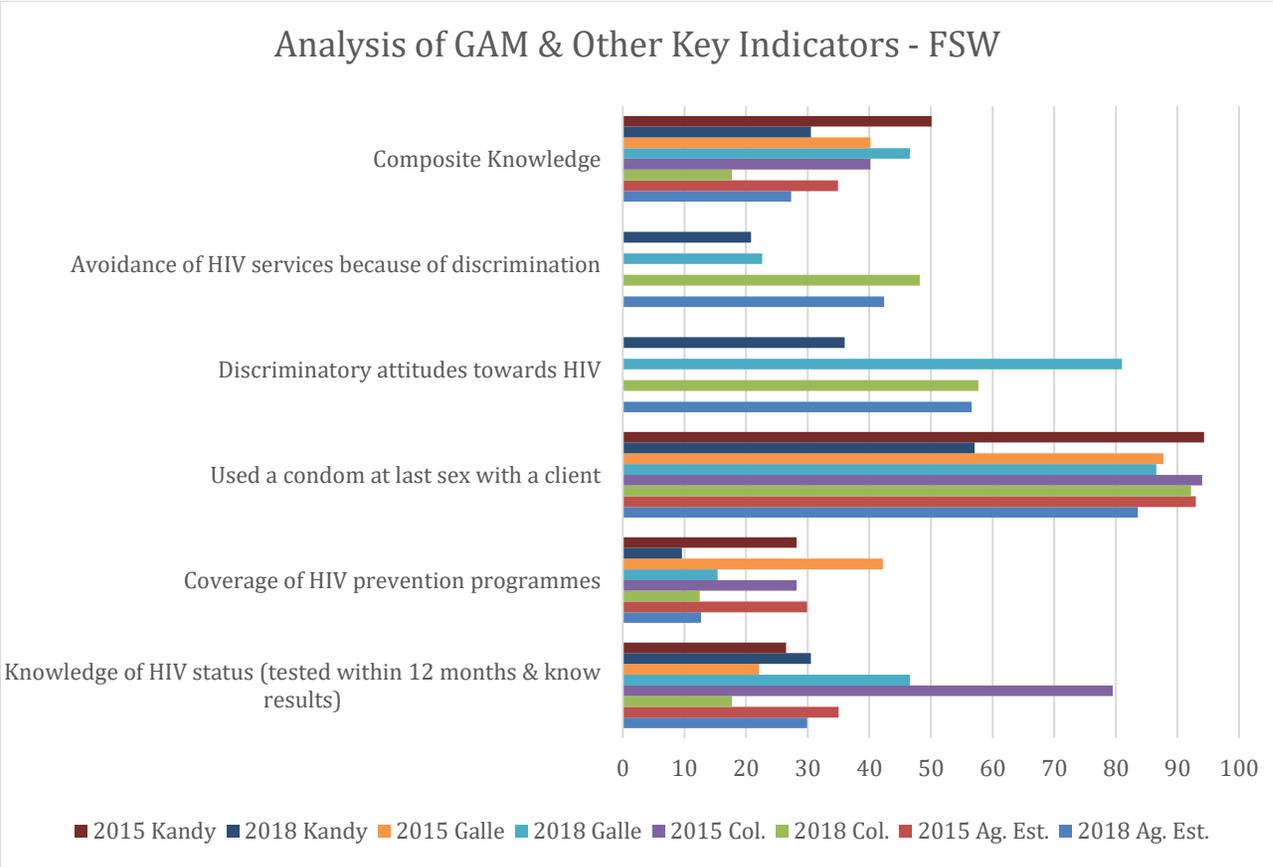
**Table 329: Summary of GAM and other key indicators amongst FSW**

Description of the Indicator	Aggregate Estimate (%)		Colombo (%)		Galle (%)		Kandy (%)	
	2014/15	2018	2014/15	2018	2014/15	2018	2014/15	2018
HIV prevalence among FSW (% HIV positive)	0.81	0.24	1	0.4	1	0	0	0
Active syphilis among FSW (VDRL)	0.98	1.7	1.6	2.2	0	2.0	0	2.5
Viral hepatitis among FSW (HBV)	N/A	0.37	N/A	0.6	N/A	0	N/A	0
HIV and hepatitis co-infection among FSW	N/A	0	N/A	0	N/A	0	N/A	0
Knowledge of HIV status (tested for HIV in past 12 months and know the results)	35.01	29.9	79.5	17.7	22.1	46.6	26.5	30.5

Description of the Indicator	Aggregate Estimate (%)		Colombo (%)		Galle (%)		Kandy (%)	
	2014/15	2018	2014/15	2018	2014/15	2018	2014/15	2018
Coverage of HIV prevention programmes <sup>1</sup>	29.9	12.7	28.2	12.5	42.2	15.4	28.2	9.6
Used a condom at last sex with a client	93.0	83.6	94.0	92.2	87.7	86.6	94.3	57.1
Discriminatory attitudes towards HIV <sup>2</sup>	N/A	56.6	N/A	57.7	N/A	81.0	N/A	36
Avoidance of HIV services because of discrimination <sup>3</sup>	N/A	42.4	N/A	48.2	N/A	22.6	N/A	20.8
Composite Knowledge	34.93	27.3	40.2	17.7	40.2	46.6	50.1	30.5

N/A: Was not included in survey.

1. Definition of indicator changed, hence not possible to compare. In previous survey this was defined as received free condoms in last 12 months and know where HIV testing can be done, in 2018 GAM defines coverage as received at least two interventions in the past three months (given condoms and lubricant; counselling on condom use and safe sex; received an STI test).
2. No aggregate estimates for 2014/15 as this is a revised GAM indicator.
3. No aggregate estimates for 2014/15 as this is a revised GAM indicator.



In the table below MSM aggregate results and comparisons across geographic location and between the 2014/15 and 2018 surveys, are presented. HIV and syphilis prevalence remain low and looking at aggregate estimates prevalence has in fact reduced. The prevalence is highest in Colombo as in the previous survey. Viral hepatitis is minimally present, in Colombo and Anuradhapura. All behavioural indicators have improved overall, including knowledge of HIV status (15.42 % in 2014/15 and 40.3% in 2018), use of condom at last anal sex (57.94% in 2014/15 and 82.8% in 2018), and coverage of HIV programmes (19.29% in 2014/15 and 27.0% in 2018). It is important to note, however, that aside from condom usage the behavioural indicators are quite low.

**Table 330: Summary of GAM and other key indicators amongst MSM**

Description of the Indicator	Aggregate Estimate (%)		Colombo (%)		Galle (%)		Anuradhapura (%)	
	2014/15	2018	2014/15	2018	2014/15	2018	2014/15	2018
HIV prevalence among MSM (% HIV positive)	0.9	0.22	1.2	0.6	0.4	0	0	0
Active syphilis among MSM (VDRL)	1.66	1.3	2.4	1.4	0.3	0.3	0	0.3
Viral hepatitis among MSM (HBV)	N/A	0.4	N/A	0.6	N/A	0	N/A	0.3
HIV and hepatitis co-infection among MSM	N/A	0	N/A	0	N/A	0	N/A	0
Knowledge of HIV status (tested for HIV in past 12 months and know the results)	15.42	40.3	19.6	48.6	5.2	45.2	8.6	3.7
Coverage of HIV prevention programmes <sup>1</sup>	19.29	27.0	21.1	30.8	10.1	6.1	22.5	28.4
Used a condom at last anal sex	57.94	82.8	64.6	85.6	36.6	92.0	50.6	67.0
Discriminatory attitudes towards HIV <sup>2</sup>	N/A	38.1	N/A	32.7	N/A	85.8	N/A	13.8
Avoidance of HIV services because of discrimination <sup>3</sup>	N/A	31.7	N/A	34.7	N/A	37.0	N/A	29.1
Composite Knowledge	30.46	33.5		21.2		50.5		67.4

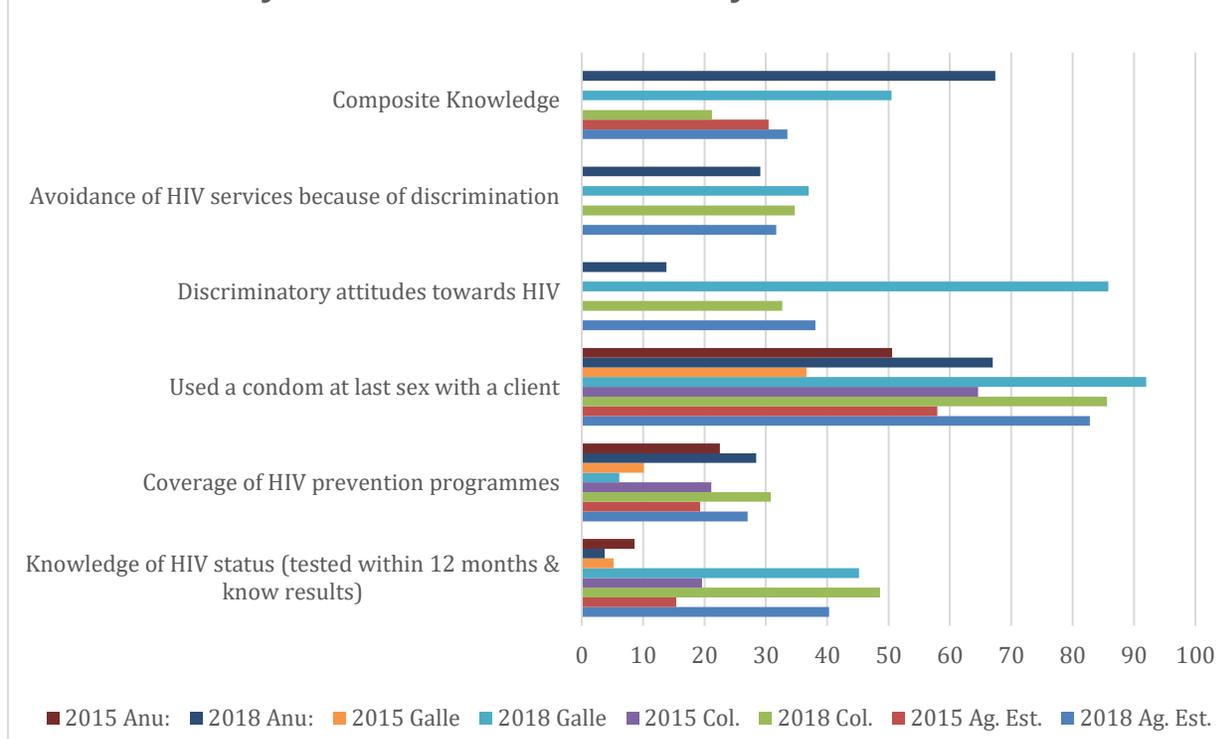
N/A: Was not included in survey.

1. Definition of indicator changed, hence not possible to compare. In previous survey this was defined as received free condoms in last 12 months and know where HIV testing can be done, in 2018 GAM defines coverage as received at least two interventions in the past three months (given condoms and lubricant; counselling on condom use and safe sex; received an STI test).

2. No aggregate estimates for 2014/15 as this is a revised GAM indicator.

3. No aggregate estimates for 2014/15 as this is a revised GAM indicator.

## Analysis of GAM & Other Key Indicators - MSM



The overall prevalence of HIV and STIs amongst PWID is nil, which is no change from the previous round of IBBS survey. Knowledge of HIV status remains unchanged, and coverage of prevention programmes negligible (4.1% in 2014/15 and 2.7% in 2018), however safe injecting practices have significantly increased, from half the population in 2014/5 (50.7%) to over three quarters (80.5%) in 2018.

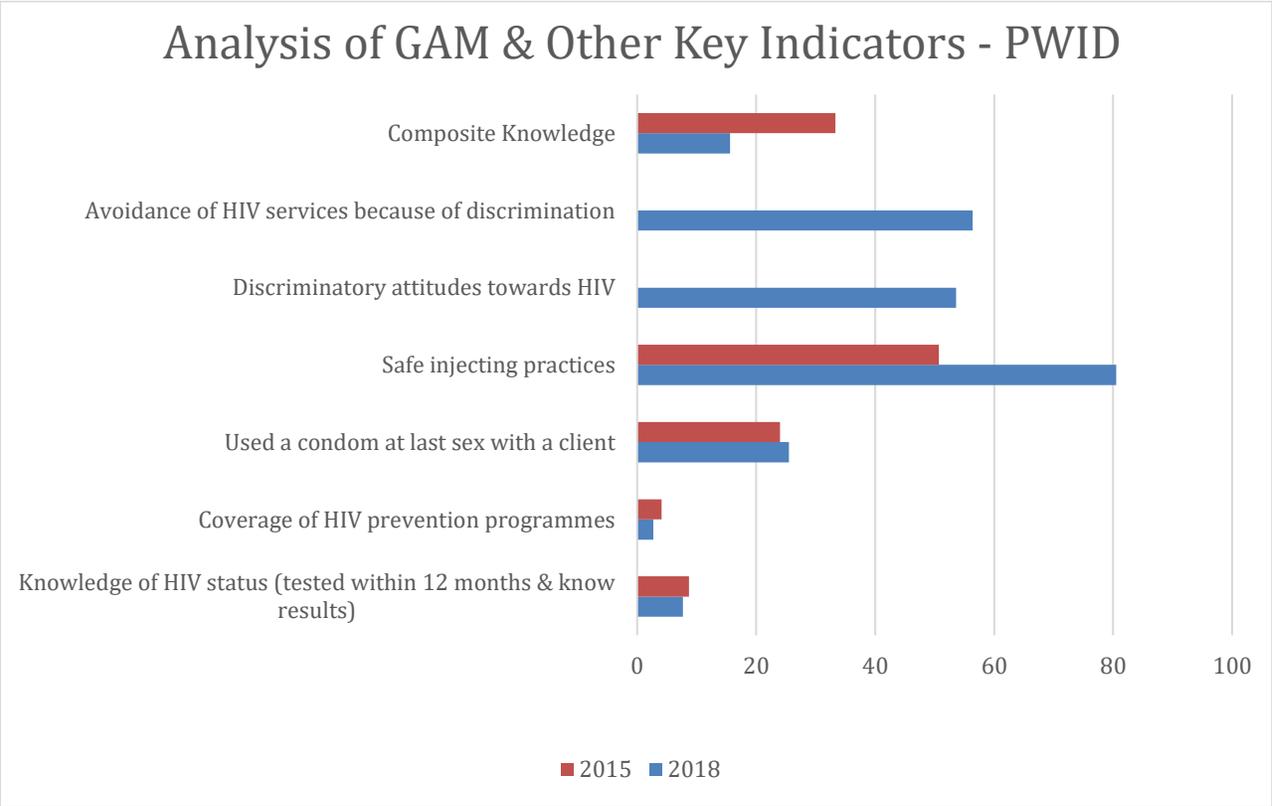
**Table 331: Summary of GAM and other key indicators amongst PWID**

Description of the Indicator	Colombo (%)	
	2014/15	2018
HIV prevalence among PWID (% HIV positive)	0	0
Active syphilis among PWID (VDRL)	0	0.3
Viral hepatitis among PWID (HBV)	N/A	6.2
HIV and hepatitis co-infection among PWID	N/A	0
Viral hepatitis among PWID (HBV or HCV)	N/A	6.3
Knowledge of HIV status (tested for HIV in past 12 months and know the results)	8.7	7.7
Coverage of HIV prevention programmes <sup>1</sup>	4.1	2.7
Used a condom at last sex	24.0	25.5
Safe injecting practice <sup>2</sup>	50.7	80.5
Discriminatory attitudes towards HIV <sup>3</sup>	N/A	53.6

Description of the Indicator	Colombo (%)	
	2014/15	2018
Avoidance of HIV services because of discrimination <sup>4</sup>	N/A	56.4
Composite Knowledge	33.3	15.6

N/A: Was not included in survey.

1. Definition of indicator changed, hence not possible to compare. In previous survey this was defined as received free condoms in last 12 months and know where HIV testing can be done, in 2018 GAM defines coverage as received at least two interventions in the past three months (given condoms and lubricant; counselling on condom use and safe sex; received an STI test).
2. % Used a sterile needle and syringe at last injection in the past one month.
3. No aggregate estimates for 2014/15 as this is a revised GAM indicator.
4. No aggregate estimates for 2014/15 as this is a revised GAM indicator.



The overall prevalence of HIV and STIs amongst BB is 0.2, which is slightly higher than in 2014/15, but the difference is negligible. Behavioural indicators, however, have increased across the board, including knowledge of HIV status, coverage of prevention programmes, condom use at last sex, and composite knowledge of HIV.

**Table 332: Summary of GAM and other key indicators amongst BB**

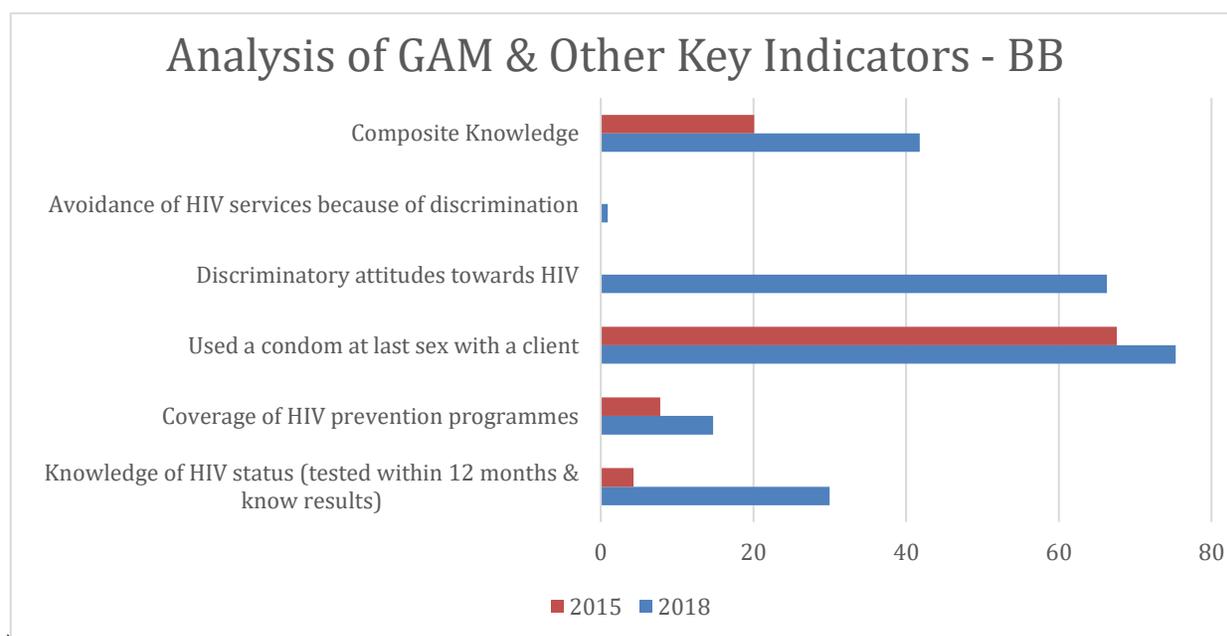
Description of the Indicator	Galle (%)	
	2014/15	2018
HIV prevalence among BB (% HIV positive)	0	0.2
Active syphilis among BB (VDRL)	0	0.2
Positive for Herpes	N/A	5.0
Viral hepatitis among BB (HBV)	N/A	0
HIV and hepatitis co-infection among BB	N/A	0
Knowledge of HIV status (tested for HIV in past 12 months and know the results)	4.3	30.0
Coverage of HIV prevention programmes <sup>1</sup>	7.8	14.7
Used a condom at last sex with tourist	67.6	75.3
Discriminatory attitudes towards HIV <sup>2</sup>	N/A	66.3
Avoidance of HIV services because of discrimination <sup>3</sup>	N/A	0.9
Composite Knowledge	20.1	41.8

N/A: Was not included in survey.

1. Definition of indicator changed, hence not possible to compare. In previous survey this was defined as received free condoms in last 12 months and know where HIV testing can be done, in 2018 GAM defines coverage as received at least two interventions in the past three months (given condoms and lubricant; counselling on condom use and safe sex; received an STI test).

2. No aggregate estimates for 2014/15 as this is a revised GAM indicator.

3. No aggregate estimates for 2014/15 as this is a revised GAM indicator.



TGW were not included in the 2014/5 survey and therefore data is only comparable across districts, although aggregate estimates are provided. Overall, HIV and STI prevalence is low among TGW in Sri Lanka, with only a few cases of HIV and Syphilis reported in Colombo, and no cases of Hepatitis. The

only well performing behavioural indicator is condom usage which is over three quarters overall (76.3%), with a noticeable difference in Colombo (82.3% in comparison with Jaffna (36.5%). Other than condom usage at last sex, all other behavioural indicators are low, less than half know their HIV status (36.9%) and have been reached by HIV prevention programmes (38.5%). Furthermore, discriminatory attitudes are present in a third of the population (38.5%) and nearly half the population avoids HIV services due to discrimination (47.4%).

**Table 333: Summary of GAM and other key indicators amongst TGW**

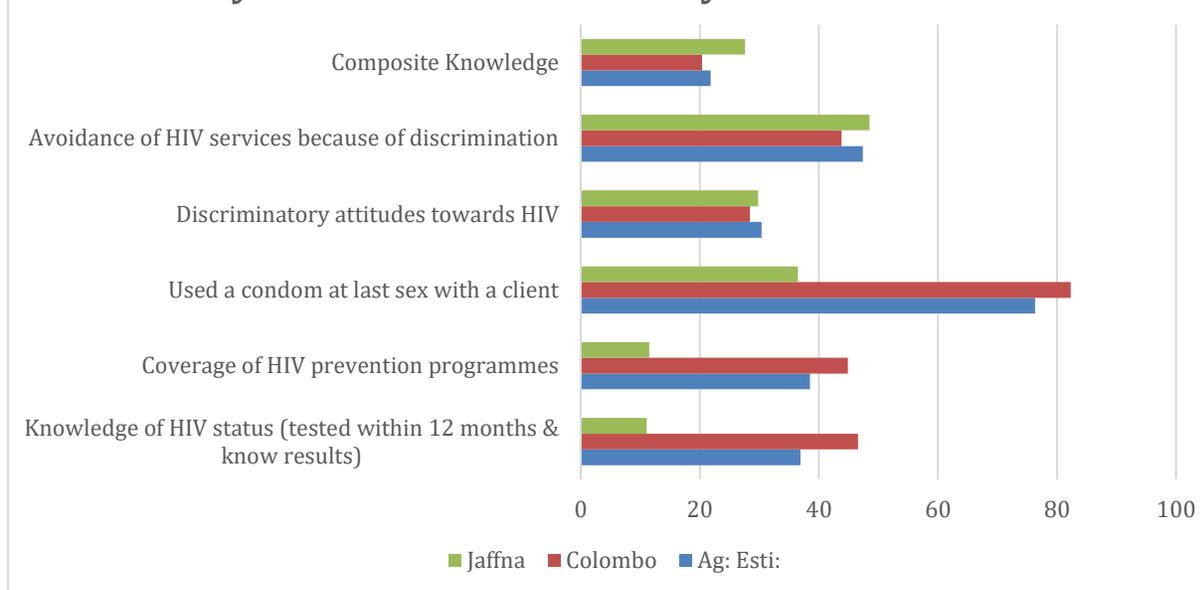
Description of the Indicator	Aggregate Estimate (%)	Colombo (%)	Jaffna (%)
	2018	2018	2018
HIV prevalence among TGW (% HIV positive)	0.48	1.2	0
Active syphilis among TGW (VDRL)	0.24	0.4	0
Viral hepatitis among TGW (HBV)	0	0	0
HIV and hepatitis co-infection among TGW	0	0	0
Knowledge of HIV status (tested for HIV in past 12 months and know the results)	36.9	46.6	11.1
Coverage of HIV prevention programmes <sup>1</sup>	38.5	44.9	11.5
Used a condom at last sexual intercourse of anal sex	76.3	82.3	36.5
Discriminatory attitudes towards HIV <sup>2</sup>	30.4	28.4	29.8
Avoidance of HIV services because of discrimination <sup>3</sup>	47.4	43.8	48.52
Composite Knowledge	21.8	20.4	27.6

1. Definition of indicator changed, hence not possible to compare. In previous survey this was defined as received free condoms in last 12 months and know where HIV testing can be done, in 2018 GAM defines coverage as received at least two interventions in the past three months (given condoms and lubricant; counselling on condom use and safe sex; received an STI test).

2. No aggregate estimates for 2014/15 as this is a revised GAM indicator.

3. No aggregate estimates for 2014/15 as this is a revised GAM indicator.

## Analysis of GAM & Other Key Indicators - TGW



### GAM Indicator for Programme Reach

Because of changes in the definition of GAM indicators over the years, comparison of indicators is challenging. As such, the indicator for reached with HIV prevention programmes was calculated using new standard definition from 2018, but also using the old definition from 2014, used in the previous IBBS survey. The definition in 2014 was **received free condoms in the last 12 months** and know where HIV testing can be obtained, while the definition in the 2018 GAM guidance is **received free condoms in the last 3 months or during the reference week** and know where HIV testing can be obtained.

**Table 334: Summary of GAM indicator on prevention programme reach using 2014 definition**

	Sample proportion n/N (%)	Population estimates % (95% CI)
<b>BB Galle</b>	<b>103/372 (27.7)</b>	<b>25.6 (20.7, 30.6)</b>
FSW Colombo	165/458 (36.0)	31.7 (26.1, 37.3)
FSW Galle	132/359 (36.8)	37.3 (31.0, 43.6)
FSW Kandy	53/354 (15.0)	12.8 (9.7, 15.9)
<b>FSW aggregated estimate</b>	-	<b>28.6 (25.0, 32.2)</b>
MSM Anuradhapura	164/352 (46.6)	45.1 (40.1, 50.0)
MSM Colombo	179/350 (51.1)	49.5 (42.6, 56.4)
MSM Galle	86/361 (23.8)	23.4 (18.3, 28.5)
<b>MSM aggregated estimate</b>	-	<b>44.1 (39.4, 48.8)</b>
<b>PWID Colombo</b>	<b>22/305 (7.2)</b>	<b>6.2 (2.9, 9.6)</b>
TGW Colombo	139/254 (54.7)	53.1 (46.3, 59.9)
TGW Jaffna	88/252 (34.9)	40.9 (33.7, 48.0)
<b>TGW aggregated estimate</b>	-	<b>50.7 (45.1, 56.3)</b>

## MSM and TGW combined key indicators

In the previous IBBS survey MSM and TGW were included as one key population, whereas in 2017/8 this group was disaggregated in recruitment and implementation of RDS. In order to fully compare all potential trends, key GAM indicators for MSM and TGW were also analysed as one dataset, for full data comparability across the surveys. The table below shows MSM and TGW combined have an HIV prevalence of 0.8%, syphilis prevalence of 1.0%, and Hepatitis B prevalence of 0.3%. Less than half of all MSM (47.7%) and TGW know their HIV prevalence, coverage of HIV programmes is low and discriminatory attitudes exist. The best performing indicator is condom usage, with 86.1% having used a condom at last anal sex.

**Table 335: MSM and TG combined indicators**

Key indicator	Sample proportion among MSM n/N (%)	Sample proportion among TGW n/N (%)	Sample proportion among MSM and TGW n/N (%)
HIV prevalence (% HIV positive)	2/354 (0.6)	3/254 (1.2)	5/608 (0.8)
Active syphilis	5/354 (1.4)	1/254 (0.4)	6/608 (1.0)
Viral hepatitis (HBV)	2/354 (0.6)	0/254 (0.0)	2/608 (0.3)
HIV and hepatitis co-infection	0/354 (0.0)	0/254 (0.0)	0/608 (0.0)
Knowledge of HIV status (% Know HIV status from an HIV test)	169/348 (51.4)	115/247 (46.6)	284/595 (47.7)
Coverage of HIV prevention programmes (% Reached with HIV/AIDS prevention programs)	109/354 (30.8)	114/254 (44.9)	223/608 (36.7)
Coverage of HIV prevention programmes (received free condoms in the last <u>3 months</u> <u>or during the reference week</u> and know where HIV testing can be obtained)	179/350 (51.1)	139/254 (54.7)	318/604 (52.6)
Condom use (% Used a condom the last time they had anal sex with a male partner)	303/354 (85.6)	215/247 (87.0)	518/601 (86.2)
Discriminatory attitudes towards PLHIV (% who answer 'No' to at least one of the two questions)	83/254 (32.7)	55/194 (28.4)	138/448 (30.8)
Avoidance of HIV services because of stigma and discrimination (% who answer 'Yes' to at least one of the reasons)	42/121 (34.7)	42/96 (43.8)	84/217 (38.7)
Age (% 25+)	275/354 (77.7)	189/254 (74.4)	464/608 (76.3)
Income (% 20,000 Rs.+)	285/351 (81.2)	230/252 (91.3)	515/603 (85.4)
Knowledge about HIV prevention and transmission (calculated as in 2014)	80/354 (22.6)	53/254 (20.9)	133/608 (21.9)

## 5. Conclusions

Implementation of IBBS surveys pose numerous methodological, logistical, financial, and legal challenges, therefore completion of any survey should be recognized. The fact that Sri Lanka has now completed one round of BSS survey and two rounds of IBBS surveys is a noteworthy achievement. This survey collected an immense amount of data, surpassing the targeted sample size across all groups, and providing a third data point for surveillance over just over a decade. Summaries key populations per geographic location as well as aggregate estimates across sites have been provided, and analysis of GAM indicators and trends highlighted, comparing the 2014/15 IBBS and the finding from 2018. Conclusions and recommendations are elaborated by population.

### **FSW**

Overall HIV and STI prevalence remains low amongst key populations in Sri Lanka. However, an increase in syphilis amongst FSW is noteworthy in Colombo specifically, from 1.6% in 2014/15 to 2.2% in 2018. Behavioral indicators amongst FSW are poor, as was the case in the 2014/15 survey, and in fact have seen little improvement. The only exception is condom usage, which shows more than three quarter of the populations used a condom at last sex with a client; however, it is important to note that this indicator decreased across all sites from 2014/15 to 2018.

### **MSM**

HIV and STI prevalence amongst MSM remains low, and in fact lower than in the previous survey, although the differences are minimal. Only Colombo resulted in any HIV positive MSM cases. While increases in behavioral indicators are noted, overall these indicators are still performing poorly, with MSM exhibiting risk behavior including less than half aware of their HIV status and poor coverage of HIV programmes (approximately a third of the population). On a positive note, condom usage at last anal sex increased from just over half to over three quarters, which is a significant difference.

### **TGW**

TGW were not included in the 2014/5 survey and therefore data is only comparable across districts and an aggregate estimate across the two sites. Overall, HIV and STI prevalence is low among TGW in Sri Lanka (0.48% HIV and 0.24% syphilis), with only a few cases of HIV and Syphilis reported in Colombo, and no cases of Hepatitis. The only well performing behavioural indicator is condom use. Over three quarters of TGW used a condom at last sex, with a noticeable difference between the two sites (over three quarters in Colombo but only a third in Jaffna). Other than condom usage at last sex, all other behavioural indicators show minimal prevention response reaching this population, with just over a third whom know their HIV status and have been reached by HIV prevention programme. Furthermore, discriminatory attitudes are present in a third of the population and nearly half the population avoids HIV services due to discrimination.

## **PWID**

The overall prevalence of HIV and STIs amongst PWID is low, which is no change from the previous round of IBBS survey. Knowledge of HIV status remains unchanged, and the difference in coverage of prevention programmes has shown a slight decrease from 4.1% to currently only 2.7% coverage; however this change is negligible and should be noted as such. More importantly, the coverage is poor. However, in a positive trend, safe injecting practices have significantly increased, from half the population in 2014/15 to over three quarters in 2018.

## **BB**

The overall prevalence of HIV and STIs amongst BB is 0.2%, which is slightly higher than in 2014/15, but the difference is negligible. Behavioural indicators, however, have increased across the board, including knowledge of HIV status, coverage of prevention programmes, condom use at last sex, and composite knowledge of HIV, showing positive progress.

Overall, the prevalence of HIV and STIs remains very low across all populations groups in Sri Lanka, however the presence of risk behaviour including inconsistent condom usage, poor HIV health seeking behaviour, and poor knowledge of HIV, combined with poor coverage of HIV prevention programmes, could result in increases in prevalence. As a result, the situation should be closely monitored through routine and sentinel surveillance. Additional recommendations can be found in the following chapter.

## 6. STUDY LIMITATIONS

As with the previous IBBS survey in 2014/15, there are a number of limitations in implementation of this survey, outlined below.

- i. Recruitment for certain groups was more difficult than others, specifically FSW and MSM in Galle, MSM in Colombo and TGW in Jaffna, which took longer than other groups. Being introduced by peers in the populations was not sufficient to encourage recruitment. As such, the IBBS team engaged in mobile RDS, as was done in the previous survey. The team, including interviewers, VCT nurses, the coupon manager and team leader moved on site to a few places on a temporary basis to reach the desired sample sizes. While the team did their best to ensure the basic principles of RDS and natural recruitment were not disrupted, this is a study limitation as RDS in principle should be completely organic in terms of the way peer recruit.
- ii. Disaggregation by age is limited due to small sample sizes, and therefore only provided where feasible.
- iii. Data collection was undertaken during the election period in the country where the social climate in the cities were not as normal as other days. This resulted in low attendance of KP members at the IBBS sites and delays in completing the data collection.
- iv. A few NGOs who are working with the Key Populations communicated through their peers that the KP members should not participate at the survey. This too resulted in low daily attendance of KP members.
- v. There were communities in few cities who threatened that the IBBS site offices should not be located in their area. This resulted in moving the IBBS site offices to other areas in the midst of the field data collection.
- vi. There were few instances where the survey offices were attacked by the community due to misunderstanding on the IBBS Survey activities and disliking for KP members visiting their areas where the IBBS site situated.
- vii. The survey implementation was further hampered by factors such as communities working against the project activities due to misleading information communicated by sections of the community and political differences between the officials of NGO staff and the individuals connected to the village level political leadership.

### Security Incident in Galle and Lessons learnt

There was an incident that occurred in Ambalangoda (in Galle district) where a mobile RDS site was conducted at one of NGO offices, where about 10 MSMs participated at the IBBS Survey. An incident occurred after eight days of RDS mobile data collection, where a few villagers forced opened the NGO office and threatened the NGO officials. The accusation was that the blood had been drawn from youth illegally and that infertility drugs has been injected. Though these were baseless allegations, there were no officials in the village to clear the doubts of the villagers. Upon investigation by the Police, it also came to light that the accusation to the NGO office was fuelled by political differences of one of the NGO officials and other individual who forcefully entered the NGO office. The lessons learnt by the IBBS team from the above incident are presented below.

- Enhanced awareness on IBBS activities and mobile RDS sites among the public officials in the districts where the survey is conducted is crucial. As the IBBS survey accommodates only members

of key populations, there is a tendency of creating doubts in the minds of villagers as to why blood is being collected and why there is a restriction in participation at the survey. The public generally has these doubts clarified from the public officials in the area and therefore it is essential that all public officials in the district are aware about the survey and its protocols. This therefore also limits the different explanations and interpretations provided by the public officials on the IBBS activities.

- There is a need for allocation in the IBBS budget for awareness building and advocacy. There was no budget in the current IBBS survey for awareness building and advocacy; however, it is essential that a budget allocation is made to avoid security incidents and incorrect information and rumours circulating in the community.
- Enhanced engagement by the health officials in the area is needed, as the RDS mobile clinics are arranged in a very short period of time. All health officials should be made aware the locations and key populations that are being targeted by each mobile site. Incidents, if any arise, could then be rectified by the local community, with the support of the health officials.
- NGO offices that are working with Key Populations should have proper sign boards and registrations. One of the other reasons for forced entry into the NGO office was due to the fact that there were no signboards and registration details displayed at the entrance to the office. Therefore, it is essential that all NGOs working with key populations have necessary registrations and sign boards displayed, so that the public can ascertain that it is a duly registered, and functioning office.
- As is the case with research with key populations, ensuring respondents are legitimate members of the key population can be challenging. Because incentives may result in individuals pretending to be members of the population to obtain the financial incentive, this creates an inherent bias in any study. Steps are taken to minimize this bias, such as recruiting members from the key population as part of the field team, and the use of screening questions. Moreover, the incentive amount was modest and believed not to be significant enough to encourage misrepresentation by potential respondents.
- Finally, as with the previous IBBS survey, aggregate estimates are provided across all groups, as data was collected across multiple districts, however, extrapolation as aggregate nation-wide estimates should be noted with caution, as RDS is based on social networks and geographical catchment areas. As a result, aggregate estimates are only provided for key indicators.

Due to aforementioned reasons, the consulting team is of the view that the implementation of the IBBS Survey was more challenging compared to the previous survey.

## 7. Recommendations

In the validation and dissemination meeting held in June 2018, recommendations from the 2014/5 IBBS survey were reviewed. It was important to review progress of the previous recommendations, whether any were enacted, and if yes the overall result, and if not to outline the challenges. After analysis of this information, and discussion amongst stakeholders, the following recommendations were developed. Recommendations should focus on the most high impact and value for money initiatives, given the context of HIV prevention efforts in Sri Lanka, and specifically the low prevalence setting.

- x. **Increase condom awareness and usage** across all groups. While condom usage is the best performing GAM indicator across all key populations, much of the population still indicates they do not know where to find a condom. This shows that condom distribution and supply chain mechanisms, using innovative social marketing techniques should be explored.
- xi. **Increase HIV testing**, as HIV testing remains at sub-optimal levels and therefore innovative approaches to increase testing should continue to be explored. Similar to the previous survey's recommendations, alternative testing modalities, including moonlight and mobile testing, and engagement with the private sector, should be explored.
- xii. **Increase participation to address HIV:** Civil society engagement as part of increasing community participation by key populations is crucial, to ensure feedback into design of interventions. Exploration of potential use of Sex Worker Implementation Tool (SWIT), a framework developed by UNFPA and UNAIDS, is one guideline which provides clear guidance on supporting key populations to develop networks and organizations. Looking to contexts where key populations are well established and leading in the HIV responses for their own populations should be reviewed, for example Kenya.
- xiii. **Reduce stigma around key populations and HIV:** An evaluation of HIV campaigns and awareness raising activities may be warranted, to establish reach of these activities, and whether they can be further tailored to the specifics of key populations. Furthermore, while a stigma index survey has been conducted, exploration as to whether the recommendations from this survey, combined with results from the IBBS, could be used to refine and tweak advocacy, and stigma reduction messaging, is recommended.
- xiv. **Innovate with HIV interventions:** Similar to the previous IBBS finding, the potential for m-health interventions should be explored, given the high ownership of mobile phones amongst all key populations. Depending on whether any health or other innovative interventions have been enacted, they may need to be evaluated. In the dissemination workshop, stakeholders expressed high usage of the internet and dating apps amongst MSM, this funding was not seen in the IBBS survey results, and therefore use of these applications (e.g. Tinder and other apps) should be further explored with qualitative research., to ascertain how risk reduction messaging could be incorporated.
- xv. **Explore comprehensive multi-sectoral programming to reduce risk and generally increase living conditions and quality of life for FSW.** Although most FSW have a source of income other than sex work, the majority (approximately 75%) earn less than 30,000 Sri Lankan Rupees per month (194 USD). According to the World Bank data for 2016, gross national income per capita in Sri Lanka 3,850 USD. Similarly, compared to the general population in Sri Lanka, among which 10.4% in 2011 were living at 5.50 USD per day, the majority of FSW in Kandy are likely living in poverty. In accordance with the UNAIDS and UNFPA Sex Worker Implementation Tool (SWIT), looking at economic

opportunities, education, and general quality of life is an important component of FSW programming. Furthermore, in alignment with the Sustainable Development Goals, reduction of poverty is an important goal, and interlinked with health and social development. <sup>1,2,3</sup>

- xvi. **Increase general health seeking behaviour:** Health seeking behaviour amongst FSW in general is low, with less than half of FSW in the year preceding the survey seeing medical care. Access to HIV prevention will continue to stagnate if general health seeking behaviour is not addressed. Whether the main challenges are truly stigma, lack of prioritization, or potential financial barriers, this should be explored further.
- xvii. **Address sexual violence:** Sexual violence against FSW is prevalent, one in five FSW Colombo and Kandy having been sexually assaulted or raped, while this was much lower in Galle (only 1.2%). Following the sexual assault/rape, few FSW had sought medical treatment and none reported it to the police. These findings are similar to the IBBS in 2014/5 and therefore outreach, BCC and peer support efforts should consider incorporating, if not already, case management of rape and reporting, or a higher emphasis if already incorporated.
- xviii. **Next IBBS survey:** The majority of TGW in the survey had a regular partner and for the majority their partner is a man. It is recommended that further discussion go into whether TGW need to be included as a separate category in the next round of IBBS survey.