

National Response to HIV/AIDS and Sexually Transmitted Infections in Sri Lanka

Mid Term Review
2013-2017 National Strategic Plan

January- February 2015

Reviewers

Dr. Tobi Saidel	Team Leader, Epidemiologist
Dr. N. Kumarasamy	Consultant Physician, ART
Mr. Nicolas Tavagnutti	Procurement and Supply Chain Management Consultant
Dr. Neelamani S Rajapaksa-	Consultant Medical Administrator, Director, Health Education Bureau,
Hewageegana	Ministry of Health
Prof. A. Pathmeswaran	Consultant Community Physician, Professor in Public Health
Prof. Nalika Gunawardena	Consultant Community Physician, Professor in Community Medicine

Observer

Ms. Sylwia Murray	Fund Portfolio Manager, GFATM
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Observers representing civil society

Ms. Nanditha Katugampola	Project Manager, Population Services Lanka
Ms. Kusum Jayalath	President Abhimani
Mr. Jude Fernando	Heart 2 Heart Chairperson

The Core Group

Dr. P.G. Mahipala	Director General of Health services, Ministry of Health
Dr. Sarath Amunugama	Deputy Director General, Public Health Services, Ministry of Health
Dr. Sisira Liyanage	Director, National STD/ AIDS Control Programme
Dr. Dayanath Ranatunga	Country Officer, UNAIDS
Dr. Navaratnasingam Janakan	National Professional Officer, Communicable Diseases, WHO Sri Lanka
Ms. Thushara Agus	Executive Director, Family Planning Association
Dr. C.D. Wickramasuriya	Consultant Venereologist, NSACP/Coordinator, STD Clinic
Dr. K.A.M. Ariyaratne	Consultant Venereologist, NSACP/ Coordinator, SIM Unit
Dr. Neelamani Punchihewa	Senior Medical Officer, NSACP/ Coordinator, GFATM
Dr. Janaki Vidanapathirana	Consultant Community Physician, NSACP/ Focal Point, Multi-Sectoral Unit
Mr. Buddhika Pathirana	Member of Parliament, <i>Chairman/ Samadhi Community Development Foundation, Matara</i>
Ms. Princy Mangalika	Representing PLHIV, Executive Director, Positive Women's Network

Coordinator of the Review

Dr. Manori Bandara	Assistant Venereologist, NSACP
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Acronyms and Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral therapy
ARV	Antiretroviral
BB	Beach Boys
BCC	Behavioural Change Communication
BSS	Behavioural Sentinel Surveillance
CBO	Community Based Organization
DBS	Direct Blood Spot
DU	Drug User
FSW	Female Sex Workers
FPASL	Family Planning Association of Sri Lanka
GFATM	Global Fund for AIDS, TB and Malaria
HTC	HIV Testing and Counseling
HIV	Human Immunodeficiency Virus
HSS	Health Systems Strengthening
IBBS	Integrated Biological and Behavioural Survey
IDH	Infectious Disease Hospital
IEC	Information, Education and Communication
ILO	International Labour Organization
IPT	Isoniazid preventive therapy
KP	Key Population
LBCH	Lanka Business Coalition on HIV and AIDS
LGBT	Lesbian, Gay, Bisexual, and Transgender
LFT	Liver Function Test
M&E	Monitoring and Evaluation
MCH	Maternal Child Health
MO	Medical Officer
MSM	Men who have sex with men

MRI	Medical Research Institute
MSD	Medical Supplies Division
MTR	Mid-Term Review
NAC	National AIDS Committee, National AIDS Commission
NAP	National AIDS Programme, a generic term for the NSACP
NCD	Non-communicable disease
NGO	Non-Governmental Organization
NSACP	National STD/AIDS Control Programme
NSP	National Strategic Plan
OI	Opportunistic Infection
PHI	Public Health Inspector
PLHIV	People Living with HIV
PLHA	People Living with HIV and AIDS
PMTCT	Prevention of Maternal to Child Transmission
POC	Point of Care
PR	Principal Recipient
PSM	Procurement and Supply Management
PWID	People who inject drugs
PWN	Positive Women's Network
PWUD	People who use drugs
SLFEB	Sri Lanka Foreign Employment Bureau
SIM	Strategic Information Management
SOP	Standard Operating Procedure
SPC	State Pharmaceutical Corporation
STD	Sexually Transmitted Disease
STI	Sexually Transmitting Infections
SW	Sex Worker
TG	Transgendered people
VPP	Voluntary Pool Procurement

Executive Summary

Introduction The mid-term review (MTR) of the 2013-2017 National Strategic Plan (NSP) took place in February 2015. Building upon previous reviews in 2006 and 2011, the review explored the continued progress and direction of the national response.

During the past ten years Sri Lanka has successfully maintained low HIV prevalence. The greatest achievement in recent years has been the gradual development of prevention services for key populations (KPs). Programmes addressing sex workers, men who have sex with men and transgendered people, and drug users (DUs) are now in place.

The MTR examined the various thematic areas of the NSP (Prevention, Diagnosis, Treatment and Care, Strategic Information, Supportive Environment, Health Systems Strengthening and Supply Chain Management), with a view toward evaluating how well the new strategies are working and making recommendations on things that need to be refined.

Epidemiologic Update The country's HIV epidemic has been at a very low level since the first case was reported nearly three decades ago. The estimated HIV prevalence is below 0.2% and the estimated number of people living with HIV today is between 2000 and 5000 (3,777)¹. At the end of 2014 there were 644 people on Antiretroviral therapy (ART). There has been a slow increase in the number of infections detected each year, but no change in overall prevalence. Increases in testing rates rather than incidence rates are likely to account for many of the newly reported infections. HIV prevalence remains below 1% in all KPs. Pinpointing who the risk groups are in Sri Lanka has been difficult because prevalence is so low.

Key Findings

Theme 1 - Prevention

Key populations Female sex workers (FSWs) and their clients, men who have sex with men (MSM), people who use drugs (PWUD)/people who inject drugs (PWID) and Beach Boys (BB) are the groups that have been identified as key affected populations. Interventions for KPs are delivered by the Family Planning Association of Sri Lanka (FPASL) and their sub-recipients of Global Fund for AIDS, Tuberculosis and Malaria (GFATM). The intervention model for KPs includes delivery of a basic/minimum package of services for sexual health and HIV prevention via trained peer educators. The same package is used for all KPs. Peer educators are recruited and given 6000 Rupees per month to provide outreach to a targeted number of KPs and escort them to STI clinics for testing. KP members receive 500 Rupees

¹ 2015 SPECTRUM estimate

the first time they visit the clinic. The staff of the STD clinics also participate in outreach programmes, delivering educational sessions and motivating KPs to visit clinics. Data related to interventions indicate that FPASL has achieved nearly 100% of its targets related to peer interventions, and achieved an "A" grade from the authorities who monitor the grant.

Issues that emerged related to KP interventions were the lack of a formal evaluation of the intervention model to see how well it is working, insufficient geographic coverage, absence of coverage in northern and eastern provinces, low district level targets (e.g. only 40% to be escorted to clinics for treatment), restrictions on the number of condoms that can be distributed per KP member, lack of incentives for peer educators to go beyond targets, one-size-fits all programming, insensitivity to needs of specific subsets of MSM, low coverage of MSM, classification of transgendered people(TG) as MSM, insufficient customized programming for TGs, lack of a mechanism for reaching MSM who operate independently, inattention to drug addiction issues among drug users, low testing coverage of KPs in general, and a shortage of Non-Governmental Organizations (NGOs) and Community Based Organization (CBOs) with the capacity and willingness to work with KPs.

Recommendations for key populations Revisit the current intervention model to see how well it is working and how it can be improved, explore the possibility for alternate HIV testing and care models, consider reviving community drop-in centres, address harm reduction issues for DUs, prioritize intervention locations to insure 60-80% coverage of KPs, introduce rapid testing algorithms to improve testing coverage, conduct a study to understand drug use patterns in the country, reassess the DU intervention model, continue efforts to overcome punitive legal and policy issues that hamper efforts to overcome stigma and discrimination, and support building NGO capacity to contribute to the national response.

Vulnerable populations

Migrants A significant proportion of reported cases are among people with a history of overseas migration, but this is partially because of a testing bias, and there is no evidence that migrants have higher levels of infection than the Sri Lankan population at-large. Because of their vulnerability, there have been some efforts to provide pre-departure education to this group, especially life-skills for first-time female domestic workers. More efforts to expand pre-departure prevention strategies should be considered.

Prisoners This population is targeted for HIV transmission in the NSP because many of those imprisoned have been found to be engaged in behaviours such as drug use/ intravenous drug use and risky sexual behaviours that make them vulnerable to HIV transmission. Interventions targeting prisoners in the national response are implemented

and monitored by the NSACP with financial support from the GFATM. NSACP is the sole primary recipient (PR) for prisoner interventions. The model used is similar to the peer educator model for KPs, including provision of HIV testing and STI screening. However, there is no condom distribution inside the prisons. These interventions are conducted in all 30 prisons and have been integrated into routine prisoner programmes. Inability to keep up with the demand for HIV testing in prisons, and inability to provide test results in a timely manner were cited as issues in the prisons, as well as insecure funding for activities going forward.

Armed Forces This population is also considered vulnerable and a similar essential package of interventions for them has been part of the NSCAP multi-sectoral response. Issues identified include the continuous need for advocacy with high ranking officials to sustain the interventions, as well as disrupted flows of condoms and lack of funds to continue activities going forward.

Police The key intervention among police is related to how they support interventions for KPs, especially the vagrants ordinance, which uses carrying a condom as evidence. This law hampers efforts to promote condom use among sex workers. The focus of interventions with police has been on developing positive attitudes toward condoms as a medical device.

Tourist Industry Workers Persons who are working in the hospitality sector, other than beach boys, are considered vulnerable to HIV transmission. The basis for this inclusion is not entirely clear and at present the NSACP does not have interventions for them. The ILO is providing some financial support as well as awareness-raising and IEC. A rapid assessment is recommended to more accurately define this population and assess their risk potential.

Youth and General Population Likewise the basis for considering youth or the general population in Sri Lanka as a risk group is not supported by evidence. Most of the activities in this sector are focused on general awareness and education, especially among youth, through youth societies.

Theme 2 - Diagnosis, Treatment and Care

This section of the review covered HIV testing and counselling (HTC), ART care, Prevention of Maternal to Child Transmission (PMTCT) and HIV/TB.

HIV testing and counselling HIV testing is currently done with Elisa and PA and confirmed with Western Blot. The main issues identified were the lack of dedicated programmes for testing KPs, the lack of Point of Care (POC) diagnosis, the lack of dedicated counsellors for pre and post-test counselling, and insufficient linkages to care and treatment for HIV diagnosed people. Recommendations for overcoming these issues include the expansion of

HIV testing to KPs, including training of NGO counsellors to do HIV testing, expansion of HCT at Chest clinics (to test TB patients), ongoing training for laboratory technicians in infection control, and further training of nurses and doctors at STD clinics to serve as counsellors.

Care and Antiretroviral Therapy Until December 2013 , there were 1236 People Living With HIV (PLHA) ever registered in care and 678 PLWA ever started on ART in 8 ART clinics. In the 8 clinics, consultant venereologists and medical officers initiate ART. The centres have trained nurses but do not have dedicated counsellors. No formal training in ART management is done on an ongoing basis. Patient details are not fully computerized.

Patients are to be initiated on ART when the CD4 count is 500 or less. But these guidelines have not been uniformly adopted in all clinics. CD4 cell count is used to initiate treatment and is done every 6 months. There is only one CD4 machine (FACS Count) in the country located at the NSACP laboratory and there is no back up machine. Samples from all peripheral STD clinics are transported to the NSACP for CD4 testing.

Viral load facility is available at the NSACP laboratory and viral loads are done in the sixth month after ART initiation and annually after that. Currently there is a shortage of reagents for viral load and hence the test is not done routinely.

ARV resistance testing is done to guide the need to switch to second line ART. Samples are sent to Thailand and India and reimbursed by WHO and the AIDS foundation.

The GFATM supports the procurement of ARVs for Sri Lanka. ARVs are dispensed for 2 months at a time and stock-outs are not reported by the staff or the patients. Adherence to ART seems good in all treatment sites.

Major issues include the fact that some patients must travel up to 8 hours to the ART centres to collect medications every two months, and patients who have failed ART are not routinely identified and switched to second line therapy due to problems with viral load testing.

Recommendations include scaling up of CD4 testing facilities(including procurement of back-up CD4 machine), enhanced ART adherence counselling for patients who travel long distances to collect ARV medication, and exploration of newer technologies using direct blood spot (DBS) so that specimens can more easily be collected and transported to the NSACP laboratory. Physicians who treat HIV patients should get bi-annual refresher training to update them on ART and monitoring. Current WHO guidelines should be implemented in all clinics.

PMTCT services All pregnant women in Sri Lanka seek antenatal services and deliver at the hospitals. HIV testing is not routinely done in all antenatal clinics due to low prevalence. The coverage has increased from 9% to 45% in 2014. Pregnant women who test positive are offered ART (Option B+) through the ART clinics. Early infant diagnosis using DNA PCR is not available in Sri Lanka and the samples are sent out of the country.

Issues identified include the lack of 100% testing of pregnant women.

Recommendations All pregnant women should be offered HTC. Rapid testing should be introduced so that the screening can be done at antenatal care clinics.

Tuberculosis and HIV Significant number of new patients with HIV have presented to the clinics with TB. ART centres refer all patients to chest clinics to be screened for TB. Positive patients are offered Isoniazid preventive therapy (IPT).

The main issues identified include the fact that not all confirmed TB patients are tested for HIV and the lack of pre-test counselling at chest clinics. However, the coverage has increased markedly in the last 2 years,

Recommendations It is recommended that rapid HIV testing be done at chest clinics for screening and if found positive, samples can be sent to NSACP for confirmation tests. MDRTB surveillance among HIV/TB patients should also be strengthened.

Theme 3 – Strategic Information

The units responsible for strategic information are the Epidemiology Unit, and the Strategic Information Management Unit of the NSACP.

Significant achievements include national size estimates of KPs in 2013 and a round of Integrated Biological and Behavioural Survey (IBBS) in 2014 among KPs in selected locations. However, the overall surveillance system has some inefficiencies in terms of its ability to track magnitude and direction of the epidemic, given the amount spent on mapping and surveys.

Recommendations Since Sri Lanka is a low prevalence country, HIV surveillance and IBBS surveys should be done in fewer places, focusing on locations with the largest concentrations of KPs. At the same time, much better use should be made of case reporting data. Data collection formats should be modified so that they capture more relevant information. The system should be strengthened in terms of attention to quality and reporting, especially in STD clinics where KPs who play the biggest role in potential HIV transmission are tested and treated. Analysis and use of the data can be greatly improved

so that it provides insights into testing patterns and HIV prevalence patterns among KPs. Analysis should also focus on answering other key questions about the magnitude and direction of the epidemic, and where the most new infections are coming from. This type of analysis should not be considered as a “one-off” activity but rather something that is ongoing and at the core of guiding the response.

Theme 4 – Supportive Environment

There are three strong support organizations for people living with HIV. They are all Colombo-based but work throughout the country, and there is good patient referral of HIV positive people to these organizations.

There is anecdotal evidence that the level of stigma and discrimination against PLHA by health care workers has decreased, however, the stigma index was still unacceptably high the last time it was measured in 2010.

Laws and Regulations Sri Lanka has adequate laws on protecting the fundamental rights of the citizens and is a signatory to several international conventions relevant to PLHA such as the International Covenant on Civil and Political Rights (ICCPR) and the Convention for the Elimination of All Forms of Discrimination against Women (CEDAW). In addition, the National AIDS Policy (section 3.11) explicitly addresses human rights issues of PLHA. This rights based approach to dealing with HIV could be strengthened by including a statement affirming the rights of Lesbian, Gay, Bisexual, and Transgender (LGBTs) and FSWs. This can be considered a significant omission as the provisions in the penal code and the vagrants ordinance can be considered as infringing on the rights of these people. Under the penal code sexual activity between persons of the same sex is considered an offence, and the vagrants ordinance is used by police to arrest FSWs, though prostitution is not an offence in Sri Lanka.

Socio-cultural Environment The education sector has included comprehensive reproductive health education into the school curriculum for children in grades seven to eleven. But, the actual delivery of the content remains unsatisfactory as many teachers still feel uncomfortable in teaching it. There is also still substantial opposition to condom promotion over mass media.

Some of the issues identified include the “culture of dependency” that has grown up around being HIV infected, continued criminalization of sexual activity between members of the same sex, continued prosecutions under the vagrants ordinance, and ensuring that national plans are based on local requirements as opposed to a donor agenda.

Recommendations include the need to foster self-reliance among the positive community, and the need to decriminalize sexual activity between members of the same sex, as well as making appropriate amendments to the vagrants ordinance.

Theme 5 – Health Systems Strengthening

The six building blocks of the national health system was assessed in relation to its response to HIV/AIDs and STI. There are 30 clinics functioning in the country. STD & HIV/AIDS services are not equally distributed around the country with gaps of services noted in the North and East. Shortages of Consultant venerologists were noted but all clinics had at least one medical officer who has undergone in-depth training on STD and HIV. Shortages of nurses, Public Health Inspectors, Medical Laboratory Technicians and microscopists were also noted. Though an uninterrupted provision of ART to patients was noted, forecasting , monitoring inventories and maintaining buffer stocks of ART were not optimum. The need to scale up ART provision with one clinic per district was identified. There were shortcomings in implementing the national ART guidelines. Rapid testing for HIV was not available routinely. There was only one CD4 machine (FACS Count) at the Central laboratory and it was not functional at the time of review as reagents to assess viral load were out of stock. Furthermore, the biochemistry analyzer has been out of order since December 2014. Rregarding governance, NSACP operates under the central government, and provincial STD clinics operate under the provincial setup. Collaboration between the national and peripheral administration were not optimum.

Recommendations include commencing STD /HIV services with available resources in Killonochchi, Mannar and Batticaloa districts until the clinic buildings are completed, filling staff vacancies at STD clinics, providing training on Supply Chain Management (receipt, storage and distribution of ARVs and QA/QC) to staff, considering use of the State Pharmaceutical Corporation for procurement of drugs and devices, careful forecasting, strict monitoring of inventory levels, having sufficient buffers stocks and having secure transportation and improving storage facilities for ARVs, implementing an ARV Quality Assurance and Control strategy, planning for a PSM professional team in NSACP, obtaining a back up CD4, viral load and a biochemistry machine, improving collaboration between the national and district level administrations and planning for ensuring funding sources to cover the patients in need of ART.

Conclusions and Over-arching Recommendations

Epidemic Focus

- Sri Lanka has a low level epidemic and the response must be focused on populations that have the greatest epidemic potential. These include FSWs and MSM, based on the estimated sizes of the populations, and their levels of risky behaviour.

- At the moment drug users have low epidemic potential, but if more DUs transition to injecting, the potential would increase. Focus therefore needs to be on preventing DUs from switching to injecting.
- Although overseas migrants are vulnerable, they are not a population that is driving the epidemic.
- Prisoners have behavioural risks that are associated with being members of KPs, but as long as there is no HIV circulating in those populations, there is no excess risk for prisoners at the point. However, since a large proportion of prisoners are members of KPs, the prison sites can be considered as a subset of prevention with KPs because it is a place to reach them. Only those prisons with large numbers of KPs should be prioritized.
- Youth, and the general population are not drivers of the epidemic and do not need to be the target of any prevention campaigns beyond general awareness.

Prevention

- FSWs and MSM are the KPs most in need of interventions. The interventions should be geared toward keeping the prevalence in those populations low.
- Before finalizing plans for continued programming, the current intervention model needs to be revisited, and inadequacies that have already been identified need to be addressed. Some important topics to assess include:
 - How well the model for escorting KP members to STD clinics for HIV testing is working
 - The need for alternative HTC models, possibly to include testing at NGO sites or at NGO controlled mobile sites (either or both models to include assistance of trained counsellors from STD clinic)
 - The need for community component such as drop-in center
 - Complete rethinking of interventions for DUs (which currently do not address harm reduction needs).
- Interventions for FSWs and MSM should prioritize those districts that account for approximately 60-80% of KPs.
 - For FSWs, roughly 60% can be covered by focusing on 4 districts in 3 provinces, and 80% can be covered by extending coverage to an additional 3-4 provinces.
 - For MSM, 60% can be covered by focusing on Western province alone. To reach 80% the intervention focus would need to extend into 3-4 additional provinces
- National targets should be considered as crude numbers that help establish resource needs and prioritize intervention priorities.
- Once a final set of districts is prioritized for interventions, social mapping should take place to assist with programme planning and for specific local evidence based target setting. Targets should take expected population turnover into account.

Diagnosis, Treatment and Care

HIV Testing and Counselling

- Expanded access to testing for KPs through alternate models of point-of-care testing including expanding capacity for HIV testing at NGO sites
- Training for counselors at NGOs
- Tracking of information on risk profiles of those being tested – to become integral part of case reporting (see S.I. section)

Care and ART

- Backup CD4, viral load and a biochemistry machine to be placed at NSACP
- CD4 testing capability to be expanded to 8 sites which currently dispense ART
- Ongoing training of physicians involved in HIV care should be planned

PMTCT

- HTC offered to all pregnant women in all districts to prevent maternal to child transmission. Screening through rapid testing to be made available at ANC sites.

Strategic Information

- Streamline key population size estimation activities using a two-part process where
 - part one produces rough estimates to establish overall national level resource needs and prioritize geographic locations for the response
 - part two produces detailed size estimates in areas prioritized for interventions, to be used primarily for local target setting
- Reduce HIV sentinel surveillance to include only FSWs, MSM, DUs in locations with large numbers of key population members only (e.g. > 1000). Eliminate TB patients and STD clinic patients because those groups are tested routinely. Eliminate service men because they are unlikely to experience an HIV epidemic in the absence of a concentrated epidemic among any KPs.
- Conduct IBBS surveys only in locations Improve the way case report data is collected so that it can be used to understand drivers of the epidemic and to track the epidemic among KPs
- Improve the system of recording mode of transmission of reported cases in STD clinics and NGO based HTC sites using modified strategic information format.
- Make better use of case report data through more strategic approach to analysis of case report data.
- Perform analysis to answer key questions on a regular basis (as opposed to just reporting statistics)
- Analyze data separately by type of testing site and for STD and HTC sites, focus on tracking both numerators (# positive) and denominators (# tested) separately for each key population group.

Supportive Environment

- Decriminalize sexual activity between members of the same sex and bring in appropriate amendments to the vagrants ordinance. The subcommittee on prevention and multi-sector coordination should take the responsibility to advocate for these changes
- Further empower the positive community to improve self-reliance and facilitate sustainability of their organizations. This could be achieved by affording them greater partnership in relevant activities and engaging them as a resource in activities targeted at the positive community.

Health Systems Strengthening

Service delivery

- Commence STD /HIV services with available resources in Killonochchi, Mannar and Batticaloa districts until the clinic buildings are completed
- Fill staff vacancies at STD clinics and make training compulsory for all staff working in STD clinics
- Provide training on Supply Chain Management (receipt, storage and distribution of ARVs and QA/QC) as well as other training to ensure that HIV/AIDS is well understood.

Essential medicines

- SPC to be considered for procurement of drugs and devices to facilitate efficient use of valuable staff time of NSACP

Improving ART

- Strengthen procedures for procuring ARVs, specifically those related to registration and importation of ARV drugs
- Find a proper location with sufficient space to store ARVs. Keeping them in the Colombo NSACP STD pharmacy is not suitable. Discuss central and district level storing capacities with MSD
- Ensure adequate buffer stocks of ARV strategically located in specific locations to prevent stock-out in peripheral ARV clinics.
- Ensure that all STD clinics have received computer, printer, UPS and stationary so that the inventory and distribution management tools can be computerized.
- Implement an ARV Quality Assurance and Control strategy
- plan for a PSM professional team in NSACP

Laboratory services

- Back up CD4 (including tests, reagents and provision for maintenance), viral load and a biochemistry machine to be purchased and kept at the NSACP.
- Strengthening of opportunistic infection diagnosis

Health information system

- Design strategic mechanism for contact tracing, and ensuring ART adherence

Leadership and governance

- Improve collaboration between the national and district level administrations in national STD/AIDS response

Finances

- Plan for continuation of interventions that reach KPs in the community at the end of GFATM funds.
- Plan for ensuring funding sources to cover the patients in need of ART

Introduction

The mid-term review (MTR) of the 2013-2017 National Strategic Plan (NSP) took place in February 2015. Building upon previous reviews in 2006 and 2011, the review explored the continued progress and direction of the national response.

During the past ten years Sri Lanka has successfully maintained low HIV prevalence. Earlier reviews emphasized the lack of focus in the response, and the failure to pay adequate attention to prevention of HIV in populations with the highest risk, and expending most of its effort instead on the general population and groups at lesser risk (e.g. youth, factory and plantation workers, migrants and others). The greatest achievement in recent years has been the gradual development of prevention services for KPs. Programmes addressing sex workers (SW), men who have sex with men (MSM) and transgendered people (TG), and drug users (DUs) are now in place, but need to be reviewed.

The MTR examined the various thematic areas of the NSP (Prevention, Diagnosis, Treatment and Care, Strategic Information, Supportive Environment, Health Systems Strengthening and Supply Chain Management), with a view toward evaluating how well the new strategies are working and making recommendations on things that need to be refined.

Purpose and objectives of the review

Purpose

- The overall purpose of the review was to examine whether the implementation of the national response for HIV and Sexually Transmitted Infections (STI) is going in the right direction, and whether it is on track to meet the targets defined in the national strategic plan

Objectives

- Provide a snapshot of achievements against the NSP goals and targets under the five thematic areas
- Recommend ways to maximize the results of key thematic areas over the remaining period of the strategy

Specific Objectives

- Assess and document progress toward targets
- Assess coverage and quality of prevention and treatment services, as well as service utilization by KPs
- Identify specific areas requiring improvements, and prioritizing those most likely to deliver results
- Assess continued relevance of key results areas and approaches of the NSP

- Develop a short list of recommended focus areas with a limited number of high impact activities and targets achievable within existing resources and available capacity of stakeholders
- Document lessons learned and challenges ahead
- Suggest cross-cutting themes such as gender integration, people living with HIV (PLHIV) involvement and right to health

Epidemic update

Sri Lanka is a small island country located in South Asia with approximately 22 million people as of 2015. The country's HIV epidemic has been at a very low level since the first case was reported nearly three decades ago. Since that time the cumulative number of reported infections is just over 2000², with male to female ratio of 1.6. The cumulative number of reported AIDS cases at the end of 2014 was 548, including 71 vertically transmitted infections and 336 who have died. The estimated HIV prevalence is below 0.2% and the estimated number of people living with HIV today is between 2000 and 5000 (3,777)¹. At the end of 2014 there were 644 people on ART.

The majority of infections are reported to have been transmitted through heterosexual sex, with a lesser, but steadily increasing proportion through homosexual sex. The HIV prevalence among female sex workers has remained at approximately 0.2% since the NSACP started tracking it in 2001. Very few infections have been found among people who sell sex or who use or inject drugs.

Trajectory of the epidemic – There has been a slow increase in the number of infections being detected each year, but no change in overall prevalence, as evidenced by the stable prevalence in virtually all populations being tested, including antenatal women, blood donors, KPs, and STD clients. Increases in testing rates rather than in incidence rates likely account for many of the newly reported infections. HIV prevalence remains below 1% in all KPs.

The epidemic in MSM – HIV prevalence among MSM is sometimes portrayed as increasing from 0% to 0.5% to 1% in the past five years, *however these increases cannot be considered as significant*. Realistically they represent zero infections in 2008, 2 in 2009 and 3 in 2011, detected across four provinces with very small sample sizes that did not meet the minimum requirements mandated in the HSS protocol. Despite an increased number (and proportion) of reported cases being attributable to MSM in the past few years, this may be an artifact of increased testing among MSM, together with an increased willingness to correctly acknowledge the mode of transmission. Preliminary results from the 2014 Integrated Biological and Behavioural Survey (IBBS) indicate that prevalence is below 1% for MSM in Colombo and Galle, and there is no evidence of a concentrated epidemic in this

² 2074 cumulative infections at end of 4th quarter 2014, source: <http://aidscontrol.gov.lk>

population. Among Beach Boys in Galle (who often engage in male to male sex), the prevalence of HIV is zero.

Pinpointing who the risk groups are in Sri Lanka has been difficult for reasons discussed in more detail later in this report. However, there is no single group that is known to be infected at a higher rate than others, and to be a core population that is likely to transmit HIV to others. The country still appears to be experiencing a truncated epidemic, and there is no evidence to suggest that the situation is changing.

Populations whose behaviours would increase their exposure to HIV if the virus were to enter their sexual networks include female sex workers and men who have sex with men, both of which exist in fairly large numbers in Colombo, and to a lesser degree in other larger cities. Beach boys are also a population with risky behaviour, but they are a relatively small group. There are a large number of drug users in Sri Lanka, but the vast majority of them do not inject drugs or share needles, which is the main risk behaviour for HIV transmission in this population. If this population shifts to injecting, the potential for HIV to spread would be more of a threat. So far that has not happened, although it is important to keep monitoring the situation.

Theme 1- Prevention

Background

The NSP (2013-2017) is the technical guide for the National HIV/STI response in Sri Lanka. It is being implemented by all sectors of government and civil society, under the technical guidance of the National STD/AIDS Control Programme (NSACP).

Prevention is one of the five strategic directions of the NSP 2013-2017. The five strategies related to prevention, focus on prevention and transmission of HIV among key affected populations, vulnerable groups and the general population including young people, elimination of mother to child transmission of HIV (PMTCT) and congenital syphilis and prevention of transmission through infected blood. This section of the MTR report addresses the first three. PMTCT, congenital syphilis and transmission through infected blood are addressed in other sections.

Methodology

The review of prevention comprised two components, a desk review and a field review.

A. Desk review and analysis

Many publications and documents related to response to HIV in Sri Lanka were reviewed (Annex I).

B. Field Review

a. Technical briefings

Several meetings were held with the NSACP Director, consultants and the other members of the review team, prior to the commencement of the review and in the initial stages. The main purpose was to discuss the objective of the review and to plan the process.

b. Interviews and meetings with representatives of the stakeholders

Several in-depth interviews were conducted with representatives of the stakeholders that work on preventing HIV/STD in the country. The list of persons interviewed is indicated in Annex II.

Meetings were held with all UN agencies including UNAIDS, ILO, UNICEF, UNFPA, UNHABITAT and the WHO and members of the GFATM.

c. Site visits

Following were the fields that were visited by the review team.

- Office of the non-governmental organization- Community Strength Development Foundation in Colombo

- Office of the non-governmental organization- Heart 2 Heart in Colombo
- Office of non-governmental organization- *Saviya* Foundation, Galle.
- FSW hotspots in Colpetty sea side slum areas
- DU hot spots in Galle
- BB hotspots in Galle

In addition to the review team's independent observations and findings, the present report incorporates views of the MTR core group, the working group for the thematic area of prevention and the steering committee of the MTR review.

Findings and recommendations

Role of the NSACP in national response to HIV STI in Sri Lanka

Prevention of HIV and STI in the country is a coordinated effort of the health and non-health sectors of the government, non-governmental organizations (NGO), community based organizations (CBOs) and organizations of PLHIV.

All these stakeholders of HIV/STI prevention form the National Aids Committee whose mandate is to facilitate a coordinated response to HIV and STI in the country. Similarly, provincial AIDS committees and district AIDS committees have been formulated as multi-stakeholder advisory bodies at provincial and district level. Though a National AIDS Council has been formulated under the chairmanship of the President of Sri Lanka as an umbrella body to all these committees to guide and monitor the inter-ministerial support extended to the national response to fight HIV/AIDS, its functioning has not been optimal.

The multi-sectoral unit of NSACP coordinates and guides the preventive activities by multiple non-health sectors involved in preventing HIV of their respective target populations.

The preventive response of the health sector, which are comprised screening for HIV and STIs, early treatment services, ensuring continuation of treatments and conducting HIV/STI education programmes for target population groups, are delivered through the peripheral STD clinics situated in different parts of the country.

The strong collaborations of NSACP with other stakeholders such as NGOs/CBOs and affected groups in responding to HIV in the country is commendable.

National Strategic Plan 2013-2017 of NSACP

The NSACP is guided by the NSP 2013-2017. As indicated earlier, it specifies strategies related to prevention, focusing on prevention and transmission of HIV among key affected populations, among vulnerable groups and among the general population including young people. Following is a brief description of each of these strategies.

National Strategic Plan (2013-2017) Strategy 1.1- Prevention of transmission of HIV among key affected populations

FSW and their clients, MSM and people who use drugs (PWUD)/people who inject drugs (PWD) are the groups that have been identified as key affected populations in the NSP. The previously used term 'Most-At-Risk-Populations (MARPs)' is no longer recommended by UNAIDS, and the new recommended term is 'key populations'.

NSP further specifies this strategy, as conducting the following comprehensive interventions for FSW, MSM and PWUD/PWDs.

- Improve access to HIV testing and counselling
- Condom programming
- Behaviour change modification through outreach and peer education
- STI prevention and diagnosis: testing and treatment
- Information Education and Communications (IEC) through mass media, community awareness, radio and street plays etc.
- Community involvement and implementing a comprehensive programme for people who use drugs and people who inject drugs

The NSACP has specified intervention areas and activities related to the interventions linked to each of its strategic directions in the Activity Plan of NSACP for 2016-2017. Though not specified in the NSP strategy 1.1, 'Beach boys' (BB) are also considered as one of the key population groups in Sri Lanka and NSACP interventions are directed at this group as well.

Expected outcomes by 2017 with regards to strategy 1.1, as specified in the NSP are;

- 1.1.1. HIV prevalence less than 1% among FSW, MSM, PWUD and BB
- 1.1.2. at least 80% of FSW, MSM, PWUD and BB reached by prevention services
- 1.1.3. at least 80% of FSW, MSM, PWUD and BB report consistent condom use
- 1.1.4. less than 5% of PWD report sharing of needles

All the above indicators are based on the National HIV monitoring and evaluation plan for the period of 2013-2017.

National Strategic Plan (2013-2017) Strategy 1.2: Prevention of transmission of HIV among vulnerable groups

The groups identified as vulnerable in the NSP are migrant population, prisoners, armed forces and police personnel and tourist industry workers.

The NSP specifies the following interventions to prevent transmission of HIV among the above vulnerable groups.

- IEC and Behavioural Change Communication (BCC) programmes on improving awareness among migrants
- Ensure diagnostic, treatment and care services for returnee migrants

- Provision of continuity for HIV treatment for prisoners, HIV related policy for prisoners
- IEC and BCC programmes on improving awareness among military and police
- Implement a range of HIV preventive services for persons who are working in the hospitality sector

Expected outcomes by 2017 with regards to this strategy as specified in the NSP are

1.2.1 HIV prevalence is less than 0.1% among vulnerable populations

1.2.2 80% of vulnerable populations receive at least one exposure to an HIV awareness programmes

1.2.3 at least 80% of military and police personnel are reached with HIV prevention programmes

The indicators are based on the National HIV monitoring and evaluation plan for the period of 2013-2017.

National Strategic Plan (2013-2017) Strategy 1.3: Prevention of transmission of HIV among the general population including young people

NSP specifies the following strategies to prevent transmission of HIV among the general population including young people

- Awareness programmes among the general population including young people
- Ministry of Education to expand life-skills education in schools and include HIV and sexual health
- Expand HIV interventions in the workplace
- Expansion and strengthen the provision of good quality STI services ensuring correct diagnosis based on laboratory testing or by syndromic approach
- Condom promotion programmes
- Improving access to HIV testing and counselling services

Expected outcomes by 2017 with regards to this strategy as specified in the NSP are based on the National HIV monitoring and evaluation plan for the period of 2013-2017.

It specifies that 80% of young women and men aged 15-24 years to both correctly identify ways of preventing the sexual transmission of HIV and to reject all major misconception about HIV transmission by 2017.

The following issues related to the NSP also were noticed in the MTR.

- NSP strategy 1.2 has included police personnel and tourist industry workers as being vulnerable to HIV transmission but the evidence for such categorization is not clear. The interventions listed under this strategy do not describe the whole range of comprehensive interventions that should reach this group. Furthermore, some very

specific interventions geared towards some of these groups (eg: interventions to improve attitudes of police personnel to solicit their support to facilitate condom use of sex workers) have been omitted.

- Some of the interventions listed under NSP strategy 1.3 do not specify whether they are targeted towards youth or general population and the basis for inclusion of some interventions are not clear.
- The expected outcomes identified for all three strategies only assess the outcomes of some of the listed interventions.
- The monitoring and evaluation plan of the NSP has not been designed to facilitate mid-term monitoring of prevention efforts.
- The plan did not include any community based interventions (eg: drop-in-centres)

Prevention of transmission of HIV among key affected populations

Estimated sizes and locations of key populations in Sri Lanka

FSW, MSM and DU are not legally accepted in Sri Lanka. In Sri Lankan culture these groups are socially rejected. Thus, assessing size and location of these populations to design the preventive activities require special approaches.

Identifying the importance of reliable estimates of the size and location of these populations in the country, the NSACP commissioned a national mapping and size estimation exercise of the KPs in 2013. The methodology for the study included primary geographic mapping of FSW, MSM, DU and BB carried out over a period of 3 months in 21 districts plus validation of existing lists of hotspots and size estimates from 2010 and 2012 mapping studies in the districts of Colombo, Kalutara, Gampaha and Galle.

Following the 2013 mapping and size estimation exercise, the NSACP also commissioned an Integrated Biological and Behavioural Surveillance (IBBS) in 2014, the aim being to assess the levels of risk behaviour in sub-populations with higher risks. Assessing the degree of adopting safer sexual practices by sub-populations to reduce the risk of HIV transmission and obtaining insights into factors that facilitate the uptake of and barriers to safer behaviours were also aims of the IBBS. The findings of the IBBS were not available for this Mid Term Review.

Basic findings on size estimates survey conducted in 2013 are indicated in Table 1 below.

Table 1- Key populations at risk of HIV in Sri Lanka - 2013

Key Group	FSW	MSM	DU	IDU	Beach Boys
Average: population estimated	14,132	7,551	17,459	423	1,314
Maximum: population estimated	15,935	8,554	19,542	NS	1,486
Minimum population estimated	12,329	6,547	15,338	NS	1,142

source: National Size estimation of MARPs for HIV in Sri Lanka, 2013

Female sex workers

FSW is defined as “any female who is selling sex in exchange of money or goods”. A total of 3,683 spots with a peak day average of 14,132 FSWs in the country were estimated in 2013. Most of these FSWs are operating in the districts of Colombo (43.6%), Gampaha (7.1%), Polonnaruwa (5.9%), Rathnapura (5.2%), Kandy (5%) and Kurunegala (4.9%). Most FSWs (42%) were street/public place based. Hotel/lodge (28%) and home/shanty (22%) were the other common spots of FSWs.

HIV prevalence among FSWs has remained low in the country with data indicating a prevalence of 0.2% during 2003–2004, 0.3% in 2006 in Colombo, 0.2% in 2009 and 0.2% in 2011.

NSACP data on HIV testing indicate that in 2013, 992 FSWS (7% of the estimated number in the country) underwent HIV testing at state-run STD clinics and 773 (77.9%) obtained test results.

Men having sex with men MSMs

MSMs make up a key vulnerable population in Sri Lanka because of high numbers of casual sexual partners.

The 2013 national size estimation defined MSM as "all men who have sex with other men as a matter of preference or practice, regardless of their sexual identity or sexual orientation, and irrespective of whether they also have sex with women or not". This definition included male sex workers who get paid in cash or kind for having sex with other men, Nachchi (effeminate males who have sex with other males) and all other males who have sex with other males who cannot be classified under the above categories inclusive of transgender persons.

National size estimation of 2013 estimated an average of 7,551 MSM in the country. It revealed that the districts of Colombo (52.8%), Gampaha (10.5%), Kandy (4.3%), Anuradhapura (3.9%) and Galle (3%) account for about 75% of MSMs in the country. As many as 5,493(73%) MSM operates in street/public places while 1,208 (16%) operate from home/shanty.

The MSM population was included as an HIV sentinel surveillance group starting in 2008. Up to this point, HIV prevalence among this group has remained low (0% in 2008, 0.48% in 2009 and 0.9% in 2011). According to the global report of UNAIDS 2012, the level of coverage of HIV testing among men who have sex with men in Sri Lanka was lower than 25%, whilst condom use among was between 50 and 74%.

HIV testing data indicate that in 2013, 798 MSMs (10.6%) of the estimated average MSMs in the country) had undergone HIV testing at state-run STD clinics and 611 (76.5%) had obtained the test results.

Drug users

There are two categories of drug users, oral drug user (DU) and the injecting drug users (IDU). As per the key population estimation of 2013, on average there are 17,459 drug users and 423 IDUs in the country on a given peak day. Of the DUs 3,488 (20%) live in the Colombo district while about 1,347 (7.7%) and 649 (3.7%) live in Kandy and Galle districts, respectively. These three districts account for over 30% of DUs in the country.

Lifetime prevalence of sex with an FSW was high among DUs and regular condom use with an FSW was also low. Consistent condom use with all partner types (regular, casual and commercial) in the previous 12 months was extremely low as well.

In the year 2013, 586 DUs (3.4% of the estimated average DUs in the country) had undergone HIV testing at state-run STD clinics and 443 had obtained the test results.

Beach Boys

As per the size estimation survey conducted in 2013, there are about 1,314 BBs in and around beach areas in the country on a given peak day. Most of the BBs are operational in the districts of Ampara (23.4%), Galle (20.3%), Kalutara (16.6%) and Hambantota (15.8%).

Beach boys are known to have high levels of sex with foreign female partners and anal sex with foreign male partners.

Data on HIV testing among BBs for 2013 is not reported in the Annual Report of NSACP.

Interventions to prevent transmission of HIV among key affected populations

Assessing the interventions that are being implemented, the review found that all interventions specified in the NSP are being implemented to varying degrees.

At the time of the review it was found that HIV/STD **preventive interventions that reach out to KPs** in the community were mostly through the project activities of phase 2 (2013 -2015) of the GFATM round 9 grant. NSACP is Principal Recipient 1 (PR1) of the phase 2 grant while the Family Planning Association of Sri Lanka (FPASL) is Principal Recipient 2 (PR2). FPASL took over PR2 responsibilities from Sarvodaya Shramadana Samithiya, another leading NGO in the country which was PR2 in Phase 1 of the project (2010-2012).

The project covers all groups of KPs namely, FSW, MSM, DU and BBs. As the PR 2, FAPSL is responsible for designing, implementing and monitoring the interventions to KPs.

The intervention model used is delivery of a basic/minimum service package for sexual health and HIV prevention via a trained peer educator. The following are the components of the package;

- education on sexual health/HIV prevention
- behaviour change communication through distribution of IEC materials
- condom demonstration
- condom provision
- escorting to a state STD clinic for voluntary and confidential counselling and testing services

All the key population groups, FSW, MSM, DU and BBs receive same service package. A few features such as the number of peers to be reached by a given peer educator and the number of condoms to be provided are the only differences among these packages.

The FPASL has subcontracted the delivery of the package to NGOs/CBOs. Interventions are carried out only in selected districts of the country (Figure 1). The selection is mostly based on the number of each key population as estimated by the 2013 size estimation and the availability of NGOs/CBOs which fulfil the criteria required by the GFATM to be subcontract recipients.

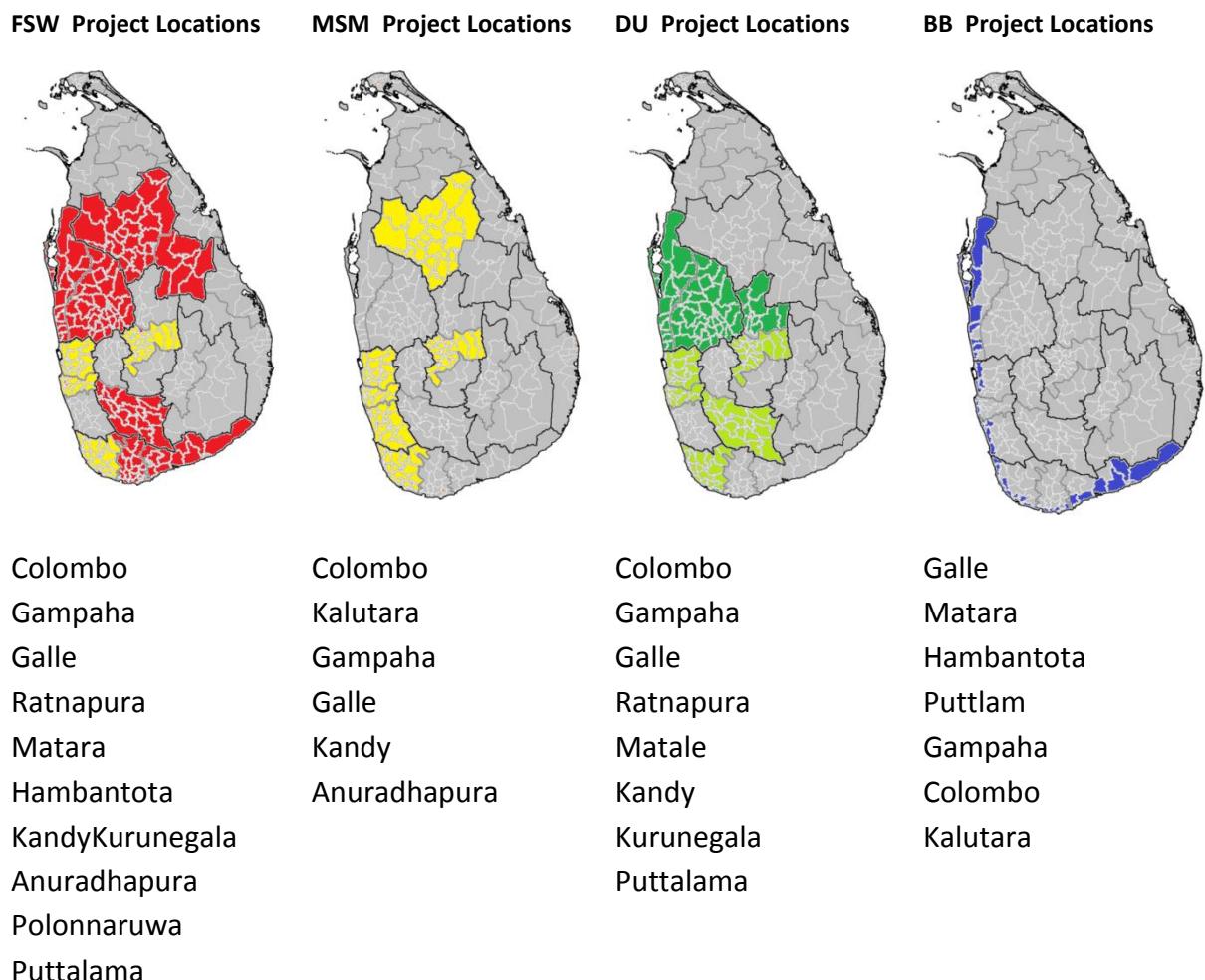


Figure 1- Districts selected for key population interventions

In this peer led model of intervention, the sub-recipient NGO/CBO are required to recruit peer educators to reach out to KPs and deliver the interventions. One trained peer educator is required to recruit a specified number of peers from the respective KPs and sustain them in the intervention throughout the project period. The peer educators were trained on intervention activities by the FPASL. The total number of KPs to be reached by the project in each district was set taking into account the sizes of the KPs in each district. The number of peer educators recruited to deliver the intervention was based on the targeted number of key population members to be reached in each district.

As part of the programmes, 6000 rupees per month is provided to each peer educator to keep the group of people intact, conduct education sessions, and escort KP members (peers) to STI clinics for STI and HIV screening and treatment. Key population members being escorted are paid Rs 500/- the first time they visit the STI clinic.

The project has specified the number of peers to be reached by each peer educator as 10-20 based on the type of the key population. In addition to the targets for outreach, the

project also specifies targets for number of peers to escort to clinics, and number of condoms to distribute per peer, per month.

Activities of peer educators are coordinated and documented by the contracted NGOs/CBOs who feed the data related to incentive linked activities of the peer educators to a centralized database established by the FPASL. Data are verified through field visits and on-site data verification exercises by the FPASL. The data are further verified by internal and external auditors and by the local funding agents.

Perusal of data related to interventions indicated that FPASL has achieved nearly 100% in all its targets in activities through the peer leaders achieving an "A" grade from the authorities who monitor the grant.

Other than the above described GFATM funded activities, the peripheral STD clinics of the NSACP also have a mandate to conduct '**outreach programmes**' in their districts to deliver education sessions and motivate the key population groups to seek services of the STD clinics for testing of HIV and screening of STIs.

HIV testing and STI screening services are another major component of prevention of HIV and STI. In Sri Lanka, the central and peripheral STD clinics of NSACP provide HIV testing services and STI screening services free of charge for anyone who wishes to obtain the service, whereas private hospitals provide the same services for a fee. FPASL and a few other organizations also provide initial HIV testing services.

A few NGOs in Sri Lanka also run '**drop in centres**' (also known as safe places) for FSWs and MSMs. They offer shelter to the KPs (mainly street based sex workers) a place to relax, rest, get information and interact with each other.

The National Dangerous Drug Control Board and a few NGOs in the country also contribute to HIV prevention activities through their **rehabilitation interventions to DUs and IDUs**. They conduct institutionalized rehabilitation interventions, which target DUs with interventions designed to prevent switching to injecting. Education on sexual health/HIV prevention and behaviour change communication through distribution of IEC materials are also components of the rehabilitation interventions.

Key issues related to the interventions to prevent transmission of HIV among key affected populations

The review revealed several issues in the design and implementation of the model of **preventive interventions that reach out to KPs in the community** through the GFATM grant. Up to date, an evaluation of the effectiveness of the peer led intervention model followed by the GFATM sponsored project has not been performed.

There was isolated evidence that some issues in the design and implementation of the model have hampered coverage and quality of the intended results. However, in the absence of any scientific efforts or an evaluation of the model, the review findings do not provide conclusive evidence of effectiveness of the model.

Furthermore, most of the issues of design and implementation of the model have been realized by the NSACP and FPASL who are the principal recipients of the Grant, but perceived 'difficulties' experienced in getting approval of the GFATM authorities for modifications to the plans had resulted in continuation of the same interventions.

Following are the main issues of the model adopted by the GFATM funded project to deliver interventions to prevent transmission of HIV among key affected populations.

- poor geographical coverage of the interventions

Figure 1 shows the districts in which the project is delivered to each of its target groups. Based on the size estimation of KPs for HIV in Sri Lanka district estimates, at least one district with high numbers of key population groups have been excluded by the project (Matale and Ampara – FSW; Matara – MSM; Hambantota – IDU; Ampara – BB). Another notable issue in the geographical coverage is that none of the districts in Northern and Eastern provinces being covered even in the presence of high estimated numbers of some key population groups in these districts (Ampara – FSW; Ampara – BB).

- poor targeted coverage in the interventions

As shown in Figure 2 and 3 the targeted number of KPs to be reached by the interventions is set low with unclear criteria.

Targets for clinic escorts (for HIV testing and screening for STIs) of each key population group is also set low at 40% of the number reached (Figures 2 and 3). The target is low and the criteria used remain unclear.

MARPs and estimated used	Targets based on estimated numbers of	No. of districts covered	Target to reach as of Dec 2014	Targets to reach as a % of estimated numbers in the districts covered as of Dec 2014	Targets to reach as a % of estimated in the country as of Dec 2014	Targets to be escorted to clinics as a % of the number targeted to be reached
FSW	Peak day average	11	4800	40.2%	33.9%	40%
MSM	average	6	4500	78%	59.5%	
DU	Peak day average	6	7000	50.6%	40.1%	
BB	Peak day average	7	1050	*107%	79.9%	

3/15/2015

** Exceeding the estimated average*

13

Figure 2- Targeted coverage of interventions to key populations as of Dec 2014

MARPs and estimated used	Targets based on estimated numbers of	No. of districts covered	Target to reach as of Dec 2015	Targets to reach as a % of estimated numbers in the districts covered as of Dec 2015	Targets to reach as a % of estimated in the country as of Dec 2015	Targets to be escorted to clinics as a % of the number targeted to be reached
FSW	Peak day average	11	4800**	40.2%**	33.9%**	40%
MSM	average	6	6000	*104%	79.5%	
DU	Peak day average	6	8000	57.8%	45.8%	
BB	Peak day average	7	1600	*163%?	*121.8%	

3/15/2015

** Exceeding the estimated average
**Same as in Dec 2014*

14

Figure 3- Targeted coverage of interventions to key populations as of Dec 2015

Furthermore, the model restricts the number of condoms that can be provided per peer. The main reason for this is the expectation that the interventions will lead KPs to meet their condom needs by purchasing them on the open market. Another reason cited for limited condom distribution is not hampering condom suppliers.

By design, the model had no provisions for financial incentives for peer educators to go beyond targets.

- Issues related to adopting the 'same model for all'

There were several issues indicating that the present model may be 'insensitive' to the needs and behaviours of MSMs. Reluctance of MSMs to visit STI clinics indicated by low coverage on clinic visits as indicated by the 2006/2007 BSS, has not been taken into account in the model. Another issue with MSM is that many operate individually and cannot be reached through NGOs or MSM networks. The model design has no mechanism to reach such MSMs.

- The existing intervention model completely 'ignores' the issue of drug use among DUs and does not have any intervention to prevent DUs becoming injecting DUs.

- Classification of transgender persons within 'MSM'

Representation of a transgender organization in the country indicated their concern regarding classifying them under MSM in the project design. There were indications that this had led to non-inclusion of this key group in the intervention model.

- Other issues related to the model

Many NGOs/ CBOs who are the sub recipients of the grant, highlighted some problems related to peer educators. Substantial dropout rates leading to issues of re-training of newly recruited peer educators and their poor education levels, were the main problems.

- Monitoring of the interventions through GFATM project were found to be robust but focused only on assessing and verifying the targeted activities linked with financial incentives.

- Issues related to the preventive interventions other than the GFATM project

Despite the fact that HIV testing and counselling of key affected populations by outreach programme is a mandate of the district STD clinics, its implementation was found to be low.

- Lack of NGOs/CBOs with acceptable technical and administrative capacity in the country was also found to be an issue that limited the contribution of NGO/CBOs to the national response of HIV and STI, and the reluctance of the NGOs/CBOs with good capacity to engage in HIV related work.

Key recommendations to improve interventions to prevent transmission of HIV among key affected populations

- FSWs and MSM are the KPs most in need of interventions. The interventions should be geared toward keeping the prevalence in those populations low.

- Before finalizing plans for continued programming, the current intervention model needs to be revisited, and inadequacies that have already been identified need to be addressed. Some important topics to assess include:
 - How well the model for escorting key population members to STD clinics for HIV testing is working
 - The need for alternative HTC models, possibly to include testing at NGO sites or at NGO controlled mobile sites (either or both models to include assistance of trained counsellors from STD clinic)
 - The need for community component such as drop-in centre
 - Complete rethinking of interventions for DUs (which currently do not address harm reduction needs).
- Interventions for FSWs and MSM should prioritize those districts that account for approximately 60-80% of KPs.
 - For FSWs, roughly 60% can be covered by focusing on 4 districts in 3 provinces, and 80% can be covered by extending coverage to an additional 3-4 provinces.
 - For MSM, 60% can be covered by focusing on Western province alone. To reach 80% the intervention focus would need to extend into 3-4 additional provinces
- National targets should be considered as crude numbers that help establish resource needs and prioritize intervention priorities.
- Once a final set of districts is prioritized for interventions, social mapping should take place to assist with programme planning and for specific local evidence based target setting. Targets should take expected population turnover into account.
- As a mechanism to improve testing of HIV among KPs, conduct outreach programme offering HIV testing using rapid testing Improve HIV testing targeting key population groups
- Conduct a study to understand drug use patterns in the country and to assess the following issues:
 - What drugs exactly are being used?
 - What kinds of addictions are drug users experiencing?
 - What problems do they perceive in their lives (if any)?
 - What kinds of services should be offered to them?
 - What would motivate them to be engaged in interventions?
- continue efforts to overcome punitive legal and policy environments and high levels of stigma and discrimination towards KPs to facilitate reaching of KPs through interventions and to encourage them utilizing HIV testing and STD clinic services
- advocate for supportive measures to build the capacities of NGOs and CBOs to contribute to national response for HIV and STI

Prevention of transmission of HIV among vulnerable populations

The groups identified as vulnerable in the NSP are the migrant population, prisoners, armed forces and police personnel and tourist industry workers.

Migrants as a population group considered vulnerable for HIV transmission in Sri Lanka

The NSP has identified outbound migrant workers as a group that is vulnerable for acquiring HIV while travelling to foreign countries. While it is true that a significant proportion of reported cases are among people with a history of overseas migration, this is partially because of a testing bias. Far more cases are detected among migrants because of the requirement by several countries that they be tested prior to obtaining their visas. While it is true that some foreign migrants are vulnerable to becoming infected, there is no evidence that a large proportion can become infected (testing data support an estimated prevalence of around 0.02%, similar to the general population prevalence in Sri Lanka). There is also no evidence that members of this population are likely to have large sexual networks back in Sri Lanka, or that they are likely to “seed” an epidemic in Sri Lanka. This topic is discussed further in the section on strategic information.

The number of departures for foreign employment in the country has increased over the past years. The numbers have increased by 9.4% from 262,961 in year 2011 to 282,331 in year 2012 (Male: 143,784 Female: 138,547). Most females (86%) who departed in year 2012 were housemaids in the countries they went to. The Kingdom of Saudi Arabia, Qatar, Kuwait, the United Arab Emirates and Jordan were the major receiving countries which absorbed Sri Lankan migrant workers in 2012. Recruitment of male workers for foreign employment has been increased by 5.5% in 2012, compared to recruitments in the year 2011.

Key interventions to prevent transmission of HIV among migrants

The following interventions targeted prevention of HIV transmission among migrants:

- outbound migrant workers are tested for HIV though the primary purposes of this testing is to fulfil the requirement for employment visa
- mandatory pre-employment training since 2010, for female domestic workers covering life skills required to protect them from risky sexual behaviours, including demonstration of use of condoms. This training was advocated for and supported by the NSCAP, who developed and published training materials and trained trainers of SLFEB)
- testing of returnees from India who are being reintegrated in the North – as a part of registration
- production and distribution of IEC materials in local languages to migrant workers at airports at the SLFEB counter by International Labour Organization (ILO). In addition to information on preventing HIV and STIs, they contain detailed information regarding HIV testing facilities in the country.

The review found that interventions while IEC and BCC programmes are being implemented, there have been no specific efforts to reach out to returnee migrants to ensure diagnostic, treatment and care services.

Key issues related to the interventions to prevent transmission of HIV among migrants

Following are the key issues related to the interventions that are targeted at preventing HIV transmission of migrants in the country.

- inbound migrants are not targeted in the interventions
- SLFEB has no records to monitor the number of workers being deported due to HIV sero-positivity
- only female unskilled domestic workers migrating for the first time are covered by the training
- There is a need to review and update the training modules and capacities of the already trained trainers to deliver the training programmes on building life skills, since there is a lapse of 5 years since the trainings have been conducted. Lack of identified funds for this purpose is an issue.
- need to continue capacity building activities for newly recruited trainers
- need to assess quality of pre-departure training

Key recommendations to improve interventions to prevent transmission of HIV among migrants

- expand pre-departure capacity building to protect oneself from risky sexual behaviours to non-domestic workers, male migrant workers and for those who have not undergone the training for a specified time period even if it is not their first departure

Prisoners as a population group considered vulnerable for HIV transmission in Sri Lanka

Prisoners are targeted for HIV transmission in the NSP as many imprisoned have been found to be engaged in behaviours such as drug use/ intravenous drug use and risky sexual behaviours that make them vulnerable to HIV transmission. Furthermore it is also known that homo-sexual activities are common among the imprisoned within the prison premises. Sri Lanka records an average number of 30,000 convicted prisoners in a given year and prison department comprise 30 different types of prison institutes comprising closed prisons, remand prisons, work camps, open prison camps and correctional centres for youth offenders.

Interventions to prevent transmission of HIV among prisoners

Interventions targeting prisoners in the national response are being implemented and monitored by the NSACP with financial support from the GFATM. NSACP is the sole PR for the interventions for the prisoners.

The intervention model used is similar to the model used for KPs and comprise delivering basic/minimum service package for sexual health and HIV prevention via a trained peer educator. The following are the components of the package

- skill development programme for sexual health promotion including HIV prevention
- behaviour change communication through formal and informal skill development through peer leaders using different communication materials

The present interventions are conducted in all 30 prisons of the country.

Selection of peer educators and training of peer educators to deliver the intervention package is being done by the prison authorities under the guidance of the multi-sectoral unit of NSACP. Welfare officers of the prisons have been selected as the trainers of the peer educators and their capacity have been built by the NSACP by conducting training of trainer sessions in the initial years of the grant. NSACP has also developed and published tailor made training modules and innovative IEC material for this purpose. A project steering committee has been formed to address the issues related to implementation of the project activities. A communication strategy also has been developed for HIV prevention activities among prisoners.

With high level advocacy by NSACP, the Department of Prison has internalized this interventional programme as a part of the life skill development programme for prisoners. NSACP has designed a special programme of like skill building which includes skills related to protecting oneself from behaviours which impose a risk of HIV transmission, for young offenders.

NSACP has also conducted an evaluation of these interventions in the prison at the end of two years of implementation which has shown the interventions to be effective.

Other than the preventive package, all the prisons in the country have also been provided the services of HIV testing. Regular HIV testing clinics are conducted in all 30 prisons once a month, and they perform roughly 50 blood tests per month. A policy has been developed on testing the prisoners for HIV.

Prisoners in all the prisons in the country have access to STI screening services in the STD clinics of the country.

All prisons in the country also conduct an annual activity for world AIDS day aiming to improve knowledge and attitudes of prison inmates of the diseases.

The NSP strategy 1.2, specifies provision of continuity for HIV treatment for prisoners and an HIV related policy for prisoners, both of which have already been fulfilled.

Key issues related to the interventions to prevent transmission of HIV among prisoners

Following are the key issues related to the interventions that are targeted at preventing HIV transmission of prisoners.

- lack of funds from the GFATM in the latter years to review the capacity of the trained and to continue capacity building activities for newly recruited trainers
- high turnover of prisoners and peer leaders needing frequent re-training of peer educators
- no permission to distribute condoms to prisoners
- inability to keep up with the demand for HIV testing
- inability to provide the test results to the prisoners due to some being released from the prison by the time the results reach the prison

Key recommendations to improve interventions to prevent transmission of HIV among prisoners

Following are the key recommendations to improve interventions among prisoners.

- HTC in prison setting should be expanded in numbers and with the use of rapid test
- development of a guideline/prison on HIV/AIDS for prisons
- identification of funds to review the capacity of the trained and to continue capacity building activities for newly recruited trainers

Armed forces personnel as a population groups considered vulnerable for HIV transmission in Sri Lanka

The three armed forces in the country record around 400,000 active personnel. Surveys conducted among armed force personnel have revealed risky sexual practices making them a vulnerable group for HIV transmission.

Interventions to prevent transmission of HIV among armed force personnel

NSACP conducted advocacy sessions with high officials in the armed forces of the country and has been successful in introducing an ongoing training programme targeting armed force personnel to provide them with an essential package of HIV prevention services, comprised of education on sexual health/HIV prevention, behaviour change communication through distribution of IEC materials, condom demonstration, condom provision and promoting them to get tested for HIV and screened for STIs.

Following capacity building of trainers in the armed forces by conducting training of trainer sessions based on tailor made modules during the years of 2011-2013 by the NSACP with financial support from the FPASL, the training programme has now been internalized with armed forces having incorporating HIV prevention package into the existing system of basic and ongoing trainings. NSACP also support the armed forces by providing IEC materials.

Though not regular, the three forces also provide its personnel condoms free of charge using condom dispensers in living quarters.

All three forces also provide personnel and their families with medical services, including HTC and STI screening and treatment services. Armed force personnel who are HIV positive are being provided with ART by the medical services.

Other than making HIV testing available on demand, armed force personnel are mandatorily tested for HIV prior to recruitment, at the time of being promoted, and prior to departure for foreign training. Groups of personnel are also tested on arrival at the airport itself using rapid tests when returning from foreign peace keeping missions.

NSACP also requests armed forces to conduct an annual activity for world AIDS day aiming to improve knowledge and attitudes of its personnel of the diseases.

Provision of an IEC and BCC programme to improve awareness among military personnel is the intervention that has been specified in the NSP strategy 1.2. The interventions that are being implemented are aligned with what is specified in the NSP.

Key issues related to the interventions to prevent transmission of HIV among armed force personnel

The key issues related to the interventions that are targeted at preventing HIV transmission of armed forces are the need for continuous advocacy efforts with high ranking officials to sustain the interventions, disrupted flow to the provision of condoms and lack of funds to review the capacity of the trained and to continue capacity building activities.

A review of trainer capacities, training needs and an evaluation of the effectiveness of the interventions has not been conducted.

Key recommendations to improve interventions to prevent transmission of HIV among armed force personnel

It is recommended that NSACP focus on continuous advocacy efforts to high ranking officials to sustain the existing interventions and for a provision of condoms to the armed force personnel at a concessionary rate.

It is also recommended that a review of trainer capacities, training needs and an evaluation of the effectiveness of the interventions, be conducted.

Police personnel as a population group considered vulnerable for HIV transmission in Sri Lanka

The Sri Lankan police force has approximately 85,000 personnel. When implementing the vagrant law against sex workers, possessing a condom can be taken as legal evidence. In the past in Sri Lanka, this hampered the promotion of condom use among sex workers. Thus, targeting police personnel in HIV prevention activities is considered crucial.

Interventions to prevent transmission of HIV among police personnel

The interventions towards police force is being designed and conducted by the NSACP with the objectives of developing positive attitudes towards condoms as a medical device and to provide the police officers with an essential package on HIV prevention.

Interventions towards developing positive attitudes towards condoms as a medical device have been targeted at the officials of the wise branch of the police. Effectiveness of the trainings has been enhanced by the use of the publication of the NSACP titled 'laws concerning commercial sex and HIV/AIDs prevention'.

As in the case of armed forces, NSACP conducted advocacy sessions with high officials in the police force and was successful in introducing an ongoing training programme to provide police personnel with an essential HIV prevention package comprised of education on sexual health/HIV prevention, behaviour change communication through distribution of IEC materials, condom demonstration, condom provision and promotion of HIV and STI testing. A session aiming at developing positive attitudes towards condoms as a medical device is also a part of all training sessions for police officers.

Following capacity building of trainers in the police force by conducting training of trainer sessions based on tailor made modules, the training programme has now been internalized in the police force. This input has now been incorporated into its ongoing trainings. NSACP also supports the police by providing IEC materials.

The police force also provides its personnel and their families with medical which includes HTC services as well as STI screening and treatment services.

Under the guidance of NSACP, the police force also conducts an annual activity for world AIDS day aiming to improve knowledge and attitudes of its personnel of the diseases.

The NSP strategy 1.2 specifies that the intervention towards police personnel should be the provision of IEC and BCC programmes to improve awareness and it is being implemented at present.

Key issues related to the interventions to prevent transmission of HIV among police personnel

The key issues related to the interventions that are targeted at police personnel are the high turnover of trained police officers in relevant posts, the need for continuous advocacy efforts with high ranking officials to sustain interventions and lack of funds to review the capacity of those who have been trained and to continuation of capacity building activities. A review of trainer capacities, training needs and an evaluation of the effectiveness of the interventions has not been conducted.

Key recommendations to improve interventions to prevent transmission of HIV among police personnel

It is recommended that interventions towards developing positive attitudes towards condoms as a medical device be continued.

Tourist industry workers as a population groups considered vulnerable for HIV transmission in Sri Lanka

Persons who are working in the hospitality sector other than the Beach Boys are considered as a vulnerable population for HIV transmission. However, the basis for this inclusion is not very clear.

Interventions to prevent transmission of HIV among tourist industry workers

NSACP does not have any intervention targeting this group. Lanka Business Coalition on HIV and AIDS (LBCH) with its mandate to facilitate HIV prevention educational activities and HIV testing in the private sector companies has recently entered into a contract with the hotel sector to conduct interventions aimed at HIV prevention among tourist industry workers.

International Labour Organization (ILO) supported awareness sessions of tourist industry workers by providing training material, IEC material and financial support.

The NSP strategy 1.2 towards tourist industry workers is very non- specific. It indicates implementing a range of HIV preventive services for persons who are working in the hospitality sector.

Key issues related to the interventions to prevent transmission of HIV among tourist industry workers

Lack of data to inform the magnitude of risk among this group and absence of an organised coordinated effort of HIV prevention were identified as key issues.

Key recommendations to improve interventions to prevent transmission of HIV among tourist industry workers

A rapid assessment to identify whether any category of tourist industry workers belong to large sexual networks in which they sell sex to tourists and if so, a rough estimate of the size of the group, is recommended.

Prevention of transmission of HIV among youth and general population

Youth and general population as groups targeted for prevention of HIV transmission in Sri Lanka

There is no evidence for youth or general population as a risk group in Sri Lanka. In this background, the basis for identifying youth and general population as groups to be targeted in prevention of HIV transmission in Sri Lanka is not very clear.

Key interventions to prevent transmission of HIV among youth and general population

Specific interventions were designed and implemented to build the capacities of youth by the NSACP in 2014. Capacity building of youth service officers and youth coop trainers by conducting training of trainer sessions based on tailor made modules and IEC materials were done by the NSACP as a means of delivering a basic package on HIV prevention services comprising education on sexual health/HIV prevention, behaviour change communication through distribution of IEC materials and condom demonstration. The trainers are expected to deliver the package to the members of youth societies, and to the youth being trained for leadership qualities.

FPASL also maintains a 'hotline' for information on sexuality, reproductive health and HIV and STI identification and prevention.

ILO is the organization which has mainly fulfilled the NSP strategy to expand HIV interventions in the workplace. The National Policy on HIV and AIDS in the world of work guides the prevention of HIV in work settings.

ILO conducted many training sessions to train the labour officers of the Labour Department giving them the capacity to conduct such sessions in work settings in the government sector. The trainings were facilitated by training manuals developed with assistance from ILO.

During the past years ILO also supported many workplace interventions comprising education on sexual health/HIV prevention, behaviour change communication through distribution of IEC materials and condom demonstration and also providing facilities of HIV testing in the private sector. Their efforts resulted in establishment of HIV and AIDS workplace programmes in the plantation sector. A manual for training of trainers of enterprises has been published by the by ILO to facilitate HIV and AIDS workplace education

programmes. ILO implemented and promoted 'VCT@WORK initiatives' among working population with special focus on sectors such as tourism, garment manufacturing, external and internal migrant workers and in export promotion zones.

Other than conducting education on disease and its prevention on mass media and on AIDS days, specific interventions targeting the general population have not been implemented in the country.

Reviewing the NSP specified intervention towards youth and the general population, the review found that interventions were non-specific, precluding any assessment of its achievement at the MTR.

Key recommendations to improve interventions to prevent transmission of HIV among youth and general population

Strengthening delivery of comprehensive reproductive health education in schools is recommended.

It is recommended that a communication strategy for general public on HIV be developed.

Theme 2- Diagnosis, Treatment and Care

Background

This section discusses the review of access to a range of HIV related services like HIV Testing and counselling (HTC), Anti-retroviral treatment (ART) care, PMTCT and HIV/TB for the general population through health facilities and community-based providers.

Methodology

The review was done by personal visits and discussions with key staff of the (NSACP), consultant venereologists from various hospitals, medical registrars involved in HIV care, nurses, pharmacists, the Director and Deputy director of the National TB programme. The Director and Deputy Director of blood transfusion services, microbiologists from the NSACP and from the Medical Research Institute (MRI), the Infectious Diseases Hospital (IDH), the ART and STD clinics of Kandy hospital, the Positive Women's Network (PWN) and the AIDS foundation were also visited. Detailed discussions were held with community members and civil society. ART clinics, pharmacies, inpatient facilities and the laboratory were visited. Medical records and logbooks were reviewed. Discussions with the key staff involved in HIV from WHO and UNAIDS in Colombo were held. The tool in Annex III was used to collect data from various providers to assess impact.

Findings and recommendations

Services covered in this review report include:

- HIV testing and counselling
- Anti-retroviral therapy
- Prevention of mother-to-child transmission
- HIV and TB services

HIV testing and counselling

In Sri Lanka HIV testing is done at all the STD clinics. All patients accessing STD services are offered counselling and testing at the STD clinics. In addition, samples from patients with confirmed TB diagnosis are sent from the chest clinics to the STD clinics for HIV testing. Samples from patients with various medical conditions if suspected are referred to the STD clinics for HIV testing, but not all TB patients are currently offered counselling for HIV testing. The HIV testing coverage in the TB programme has increased from 50% to 78.8% by the end of 2014.

HIV testing is done using a combination of ELISA and Particle agglutination test and confirmed with Western Blot. Rapid HIV testing or Point of Care (POC) diagnosis for HIV infection is not available. There are no dedicated programmes currently for voluntary HTC for key population such as MSMs, FSWs, PWIDs, BB, migrant workers and prisoners and in

Sri Lanka. These populations are offered HIV testing when they attend STD clinics. All the blood units are screened for HIV, HBV and HCV in the blood transfusion centres. Out of 95 blood banks in Sri Lanka, 20 blood banks have HIV testing facilities. HIV testing is implemented in blood banks since 1989. Only 2 cases of blood transfusion associated HIV infection are reported in Sri Lanka.

Issues identified

- HTC is not routinely offered to key population such as MSM, FSW, PWID, BB and migrant workers.
- Rapid HIV testing or POC HIV diagnosis is not available for services.
- Dedicated counsellors are not available at the clinics for pre and post-test counselling.

Recommendations

- HTC and linkage to care services should be expanded for high-risk populations such as MSMs, PWIDs, FSWs, migrant workers and beach boys. In Sri Lanka, NGOs, CBOs and other civil society led organizations are involved in the prevention and support services for these key vulnerable populations. This review highly recommends that the NSACP needs to work closely with these support organizations to provide HTC and develop linkages to care and treatment. The NSACP also needs to provide the technical training for the counsellors at these NGOs and should develop capacity for HIV testing at the NGO sites wherever possible with provision of free testing kits. Annual HIV testing for these KPs is also recommended.
- HTC should be carried out at all the Chest TB clinics to have 100% coverage for TB patients. Current efforts will meet this target and hence should be sustained.
- Ongoing training for lab technicians in infection control should be implemented.
- Since there are no dedicated counsellors at the STD clinics due to the low numbers of patients, nurses and doctors at the STD clinics, chest clinics and inpatient medical wards can be trained in pre-test, post-test and medical HIV counselling.

Care and Antiretroviral Therapy

The ART programme was initiated by NSACP in 2004. Until Dec 2013 , there were 1236 People Living With HIV (PLHA) ever registered in care and 678 PLWA ever started on ART in 8 ART clinics located at STD clinics and one at the IDH. It was estimated that 1400 persons were in need of ART as of early 2015 (as per 2014 SPECTRUM estimate). The ART coverage is therefore around 45% of estimated need. Reaching the objective of universal access will require identifying infected persons and linking them to care and treatment.

The Sri Lankan AIDS programme follows the 2014 country treatment guideline which is adapted from the 2013 WHO Treatment guidelines. Antiretroviral therapy is initiated in the ART clinics located at the STD programme and at IDH. In these centres consultant venereologists and medical officers initiate ART. These centres have trained nurses but do

not have dedicated counsellors. Support staff from NGOs and PLHIV organizations is not routinely used. Venereologists from the STD clinics are designated as ART medical officers. No formal training in ART management is done on an ongoing basis. All patients' medical records are entered in a log book. ART centres have computers but patient details are not fully computerized. Pharmacy services are available at the ART centres and handled by the pharmacists. It was observed that Zidovudine, Lamivudine, Tenofovir, Nevirapine, Efavirenz, Atazanavir and Lopinavir are the available anti-retrovirals. Until late 2013 Zidovudine was used to initiate therapy and if patients developed anaemia, Tenofovir was then substituted. Newer patients are initiated with Tenofovir containing first line ART regimen. In Sri Lanka patients are to be initiated on ART when the CD4 count is 500 or less. But these guidelines have not been uniformly adopted in all clinics. Around 20% of infected persons who are registered for pre-ART care have more than 500 CD4 cells but could become eligible for ART at any time.

CD4 cell count is used to initiate treatment and is done every 6 months. There is only one CD4 machine (FACS Count,) in the country located at the NSACP laboratory. Currently this machine is in working condition. However there is no back up machine available. 1519 CD4 tests were done in 2014. Samples from all peripheral STD clinics are shipped to the NSACP for CD4 testing. Logistics have worked well so far but could become an issue if the number increases. The centre needs another CD4 machine as backup.

Viral load facility is available at the NSACP laboratory and the tests are done using Cobas Taqman. Viral loads are done in the sixth month after ART initiation and annually after that. Currently there is a shortage of reagents for viral load and hence the test is not done routinely.

ARV resistance testing is done to switch to second line ART. Samples are sent to Thailand and NARI, Pune and reimbursed by WHO and AIDS foundation.

The ART programme follows WHO guidelines to monitor patients. Haemoglobin, Liver function tests (LFT) and Renal function test (Creatinine) are carried out at the NSACP laboratory and at the district hospitals for the patients from the peripheral ART clinics.

The Venereologists and the nurses see the patients every 2 months. ARVs are dispensed for 2 months at a time and stock outs are not reported by the staff or the patients but the potential that they will be is a worry for the future. The Global Fund for AIDS, TB and Malaria (GFATM) supports the procurement of Antiretrovirals for Sri Lanka. Patients who have complications of antiretroviral drugs or opportunistic infections (OI) are managed at the medical wards. Diagnosis of opportunistic infections (OI) is done at MRI. Non Communicable Diseases (NCDs) are managed at the medical wards.

It was observed that 40 patients are on second line antiretroviral therapy. Treatment failure is not being routinely identified of late since the viral load machine is not available (due to a shortage of reagents). Because of this logistical issue, patients who are failing first line antiretroviral drugs in peripheral clinics are continuing treatment with the failed regimen in peripheral clinics. Isoniazid preventive therapy (IPT) is not implemented due to the low prevalence of tuberculosis. Hence counselling is done by the doctors.

Seventy-one children living with HIV have been registered for care up to Dec 2014. All of them acquired HIV infection vertically. Limited paediatric formulations are available at the pharmacy at the NSACP.

Issues identified

- CD4 testing is done only at NSACP. All other centres have to ship samples to the NSACP. There is no back up machine at the NSACP
- A semi-autoanalyser for ART monitoring tests like LFT and Creatinine is not working at the NSACP. Hence patients do these tests in private lab and get reimbursed. The quality of the private labs is not sure. Also it was reported that lab technicians from the district hospitals sometimes refuse to carry out these tests on HIV positive patients.
- Patients travel from 1 to 8 hrs to the ART centres to collect medications every 2 months. This had led to disruption of ART in a few patients.
- Patients who have failed ART are not routinely identified and switched to second line therapy due to the logistical problems with viral load testing.
- Support services from NGOs and PLHA organizations are not integrated with the services at the NSACP in a systematic way. They are done in isolation.
- Drugs for Opportunistic infections are not routinely available at the hospital. They are partly supported by PLHIV organizations and partly by the AIDS foundation.

Recommendations

- Scaling up of CD4 testing facilities can be undertaken in the district hospitals especially in Kandy and Galle.
- Back up CD4 machines should be procured at the NSACP.
- Training for the lab techs on universal precautions should be made available in district hospitals. This will facilitate the involvement of lab techs at the district to do biochemical investigations to identify early side effects of the antiretrovirals.
- Laboratories should be strengthened to diagnose opportunistic infections like Cryptococcal meningitis, Toxoplasmosis and diarrheal diseases. This is currently lacking.
- Laboratories should be strengthened to diagnose co-infections such as HBV and HCV. Currently samples are sent to MRI.
- ART adherence counselling should be strengthened for those patients who travel long distances to the district hospitals to collect ARV medication.

- Un- interrupted viral load facilities should be planned for at the NSACP.
- Newer technology using DBS should be explored for rural areas so that specimens can more easily be collected and transported to the NSACP lab.
- External quality assurance for CD4 and viral load assays should be maintained.
- Physicians who treat HIV patients need bi-annual refresher training on the update of antiretroviral therapy and monitoring.
- Atazanavir should be preferred as a second-line regimen since this drug is the preferred choice in the new WHO ARV treatment guidelines and is also available as a once daily regimen. Abacavir should be made available as a substitute drug for patients who have developed kidney disease.
- Paediatric formulations of antiretrovirals should be made available for the programme.
- Family members living in the same house should be involved and trained on improving adherence for ARVs. PLHIV organizations, NGOs and civil society should be engaged more closely to ensure better follow up and retention in care.
- Current WHO guidelines should be implemented in all the clinics.
- Data of patients accessing ART services should be computerized since computers are available in all ART centres. This will provide easy access to transfer of patients to other ART centres. Confidentiality should also be strictly maintained.
- HIV Drug resistance (HIVDR) surveillance can be planned in the future to understand the prevalence and pattern of antiretroviral drug resistance mutations. This will assist the future treatment guidelines.
- Since the total estimated number of infections in Sri Lanka is less than 5000, cost effectiveness studies should be carried out on the Test and Treat strategy to find out if such a strategy will be cost effective and sustainable for the country.
- Diagnosis and documentation of NCDs should be widely implemented in HIV infected persons and appropriate linkages for care should be developed within the existing health system.

PMTCT services

All pregnant women in Sri Lanka seek antenatal services and deliver at the hospitals. HIV testing is not routinely done in all antenatal clinics due to low prevalence. The coverage has increased from 9% to 45% in 2014. Antenatal women need to go to the STD clinics for HIV testing. In 2013, 296,000 antenatal women were tested for HIV. Pregnant women who test positive are offered antiretroviral therapy (Option B+) thru the ART clinics. Normal vaginal deliveries/ C-sections are done in the district hospitals. Infant formula is provided by the AIDS foundation and breastfeeding is not practiced in HIV positive women. Early infant diagnosis using DNA PCR is not available in Sri Lanka and the samples are sent out of the country.

Issues identified

- Testing among antenatal women is not 100% despite antenatal check-ups being done at the hospital for all pregnant women.

Recommendations

- Efforts should be made to offer HTC for all (100%) pregnant women. It is suggested that rapid HIV testing can be implemented for screening at antenatal clinics. Samples found positive can be sent to NSACP for confirmation.
- All ANC staff should be trained in universal precautions and infection control practices.
- EID can be developed at NSACP.

Tuberculosis and HIV

Tuberculosis is one of the most common opportunistic infections among patients with HIV in Sri Lanka. Significant number of new patients with HIV have presented to the clinics with TB. ART centres refer all patients to chest clinics to be screened for TB. Sputum negative, Mantoux positive patients are offered IPT.

Microscopy centres refer confirmed TB patients to chest clinics for TB management. Samples are sent to STD clinics for HIV testing. Counselling for HIV testing is not provided at the Chest clinics, however coordination between the HIV and TB programmes is smooth and cross referral for care is happening.

Issues identified

- All confirmed TB patients are not tested for HIV but the coverage has increased in the last 2 years.
- Pre-test counselling is not done at chest clinics.
- Rifabutin is not available in chest clinics for patients who are on Second-line antiretroviral therapy with protease inhibitors.

Recommendations

- It is suggested that HTC should be provided in all chest clinics.
- Nurses should be trained to provide pre-test and post-test counselling at chest clinics.
- It is suggested that rapid HIV testing be done at chest clinics for screening and if found positive, samples can be sent to NSACP for confirmation tests.
- Chest physicians should be trained in the management of HIV/TB co-infection and immune reconstitution syndrome.
- Current MDRTB surveillance among HIV/TB patients should be strengthened.
- Rifabutin is currently available through generic companies and should be procured.

Programme for refugees and internally displaced

Due to the civil war nearly one million persons were displaced internally and externally and have been returning back to Northern Sri Lanka for the past two years. Due to their living conditions during displacement, awareness on HIV and STDs and voluntary counselling and HIV/STD testing can be planned and linked to appropriate care services for this population.

Theme 3- Strategic Information

Background

This section addresses how the NSACP collects, analyzes and uses information to plan, monitor and evaluate the response to HIV. Structurally, the units responsible for these activities are the Epidemiology Unit, and the Strategic Information Management Unit of the NSACP.

Methodology

The methodology adopted for the review included exploration of the NSACP website, review of quarterly and annual reports and reporting formats, HIV sentinel surveillance protocols and reports, the National M&E plan and GFATM performance framework, size estimation and mapping reports, IBBS protocols and reports, reports from previous external reviews, and review of two special reports for analyzing and updating the epidemic scenario in Sri Lanka. Discussions were also held with major stakeholders including staff of the NSACP epidemiology and SIM units, staff from the National TB programme and the Programme for National Blood Transfusion Service (NBTS), visits to the Saviya Development Foundation in Galle, including 2 PWID and 2 beach boy intervention sites, discussions with Family Planning Association's³ M&E unit, and discussions with the Local Funding Agency and Fund Portfolio Manager for GFATM.

Findings and recommendations

The National Strategic Plan for 2013-2017 for strategic information lists the following expected outcomes and strategies.

Expected Outcomes

- IBBS undertaken on a regular basis and reported to measure outcomes and the impact of the response
- Regular monitoring of HIV services (including ART, PMTCT, condom programming, blood safety) integrated into the HIMS and reported regularly
- HIV related operational research coordinated and prioritized by the SI unit with the concurrence of relevant coordinators

Strategies

- Implement the National Strategic Information Management Plan
- Improve the mechanisms of monitoring HIV related data from all sectors including civil society organizations
- Strengthen HIV surveillance, second generation HIV and STI surveillance through capacity and systems strengthening

³ FPA is Principal recipient # 2 for GFATM round 9 which implements community based interventions for KPs

- Adapt the surveillance methods and activities to detect the potential for a rising epidemic among the KPs and bridge populations that can spread the HIV infection to general population
- Mode of HIV transmission studies to be systematized and regularized
- Integrated biological and behavioural data among KPs in the country to be scaled up, systematized and conducted
- Periodic national population-based surveys (e.g. demographic and health surveys
- HIV and HAMS data integration
- Develop and implement research agenda particularly in areas where vulnerabilities are known but risks and prevalence are lesser known e.g. prisoners, military personnel, young people, etc.
- Build research capacity within Sri Lanka
- Regular mapping exercises for key affected populations
- Strengthen drug resistance monitoring
 - Establish an HIV DR working group
 - Promote the rational use of ART regimens and monitor adherence of ARV drugs
 - Conduct and expand monitoring of Early Warning Indicators
 - Conduct HIVDR surveys regularly including, where relevant, surveillance for transmission, and monitoring emergence in treated populations

Progress on Expected Outcomes in NSP

The following achievements were noted during the review

- IBBS surveys have been implemented among key risk populations in 2014 - including sex workers and men who have sex with men in three districts each, and people who inject drugs and beach boys in one district each.
- The NSACP started producing annual reports in 2012, and all information and data from the quarterly and annual reports are easily available on the NSACP website. This is a great achievement.
- Population sizes of KPs, which had previously been identified as an important data gap, have now been estimated across all districts in the country though a mapping study in 2013.
- A long list of priority research areas for 2012-2016 has been developed across several programme areas (STD care/STIs, HIV care and treatment, PMTCT, Laboratory services, Prevention of STI/HIV, Multisectoral coordination, Epidemiology, Training and capacity building, Strategic information, Counselling and testing, Condom promotion and IEC). However, only a few studies have been completed, and the rest of the list needs to be prioritized.

Progress on implementation of key strategies described in NSP

A large portion of the SI review focused on surveillance issues, specifically strengthening and adaptation of surveillance methods and activities to detect the potential for a rising epidemic among key and bridge populations, conducting IBBS and mapping studies, and studying modes of transmission. Each of the main components of the surveillance system (size estimation, HIV sentinel surveillance, IBBS surveys, and HIV case reporting), were examined in terms of how they contribute to understanding the epidemic and guiding the response.

Size estimation of key populations at higher risk

Size estimates for FSWs and MSM were done in 2010 and again in 2013 using geographic mapping.

In 2010, mapping was still relatively new and resources were limited, so the decision was made to prioritize MSM and FSWs and to map in two key districts (Colombo and Anuradhapura) in Western and North Central provinces respectively. The results from these districts (plus a third which was later mapped in Eastern province) were used to extrapolate size estimates at the national level for FSWs and MSM. These estimates were then used to develop national targets for interventions with MSM and FSWs. GFATM supported social mapping in 13 districts in 2012 to support planned interventions. These mapping studies were not done to produce size estimates but were intended to help programme implementers understand the characteristics of the population to be reached in more depth. Then in 2013 another population size estimation exercise was done, using similar methods as those used in 2010. However this time Drug Users (DUs) and Beach Boys were included in addition to FSWs and MSM. People who inject drugs (PWID) were also estimated as a subset of DUs.

Issues and challenges

- Different estimates using different methods produce different results. This is always the case with size estimates of KPs because so much depends on how groups are defined, which methods are used, the rapport between study team and the population, and the dynamic nature of the population itself. The national size estimates from 2013 were significantly lower than those of 2010 (more than 50% lower for FSWs and 66% lower for MSM). There are several possible reasons why this happened, most of which are explained in the report, but the fact that the results for 2010 were extrapolated on the basis of only a handful of districts where the concentrations of KPs were greatest seems to have been the greatest factor.

Recommendations

- The mapping exercise conducted in 2013 attempted to compensate for the inadequacies of the 2010 exercise by collecting data from all districts. The concept of doing size estimation everywhere is appealing, however it is costly, labor intensive

and ultimately not practical. A systematic process for collecting rough size estimates in all locations can produce robust national level estimates that are good enough to meet most national level needs, while prioritizing more in-depth size estimation studies for locations with the largest concentrations of KPs where interventions exist or are planned. Specifically this two part process could be as follows:

- Part I produces rough size estimates in all locations based on key informant interviews and expert opinion. The data collection is more rapid and it identifies areas that require more focus.
- Part II produces more precise estimates in locations where intervention are prioritized, (such as what was done in 2010).
- The rough size estimates from Part I can be used for:
 - Geographic prioritization of interventions among high risk groups (i.e. deciding where to do interventions)
 - National level estimates and projections (robust figures which can tolerate a higher level of uncertainty)
 - Resource mobilization at the national level (to provide a broad idea about resource needs)
 - National level target setting (to provide broad targets)
- The more detailed size estimates from Part II would be used for:
 - Local level project planning and target-setting. The methods required for these more precise estimates are more resource intensive (e.g. mapping and/or IBBS surveys). But mapping must be done anyway for programme planning and IBBS surveys for evaluation purposes. Integrating size estimation into these activities is not only more efficient, but allows for more realistic numbers for target setting in the places where it matters most (i.e. where the interventions are taking place).
- Planning for size estimation in this way requires a technical working group on population size estimation which can strategically coordinate the different strategic information activities for KPs in a way that meets the countries size estimation needs.

HIV sentinel surveillance

HIV sentinel surveillance has been conducted in Sri Lanka since 1990. The groups included are STD clinic attendees, TB patients, and female sex workers in all provinces, and men who have sex with men in four provinces, drug users in 4 provinces, and service men (army personnel in combat) in 3 provinces. The first three groups have been in place since 1990, although the number of sites has increased over time. The rest of the groups were added later. The required sample size for sentinel sites is 250, with the exception of FSWs in Colombo, and service personnel, which requires 400 per site. For STD clinic attendees, all who attend during the survey period are included.

Issues and challenges

- During the last round of HSS in 2011, with the exception FSWs and DUs in Colombo, the required sample was not obtained for any of the KPs groups (FSWs, MSM, DUs).
- Some of the districts where HSS is done have relatively small estimated numbers of key population members.
- MSM are particularly difficult to contact and enrol for surveillance.
- A key component of interventions with KPs is to escort as many members as possible to STD clinics for HIV testing. As these interventions are scaled up, with the goal of ensuring that all key population members get tested, the distinctions between sentinel surveillance for KP groups and routine testing of STD patients are becoming blurred. Over time as more and more people know their status, they may increasingly opt out of surveys, causing more biased surveillance results.

Recommendations

- Keeping these issues in mind, and given the consistent low prevalence of HIV in any population for the past 20 years, several recommendations for HSS should be considered:
 - HSS should be reduced to include only those geographic locations with a large number of key population members (e.g. more than 1000 in any given key population) and be done every two years. This is in keeping with updated guidance on second generation surveillance for locations with low level epidemics⁴.
 - TB patients and STD clinic attendees should be dropped as sentinel surveillance groups since HIV testing for all of them is now routine.
 - Sentinel surveillance for servicemen should also be dropped since the prevalence has remained at 0%. As a population whose main risk involves commercial sex, they are unlikely to see a rise in HIV prevalence as long as prevalence in FSWs is low.

⁴ Guidelines for Second Generation HIV Surveillance: an update - know your epidemic, UNAIDS/WHO Working group on global HIV/AIDS and STI surveillance, 2011

IBBS surveys

- The first round of IBBS surveys was implemented among key risk populations in 2014. This round included sex workers and men who have sex with men in three districts each, and people who inject drugs and beach boys in one district each. The 2014 surveys used RDS methodology and although the final results are not yet available, the biological data do confirm that the epidemic is not yet concentrated in any of the KPs in any district.

Issues and challenges

- Although samples sizes were reached in all 8 study sites, it is of note that the estimated key population sizes in some locations, FSWs in Galle, MSM in Galle and Anuradhapura, and PWIDs in Colombo was quite small. The study team reported difficulties reaching sex workers in Galle and Kandy, saying that the population may not have been networked well enough for RDS to work. While this is true, it is also possible that small numbers of key population members also made recruitment challenging.

Recommendations

- Given the resource intensity of conducting IBBS surveys, and considering the low prevalence and relatively low numbers of key population members in several sites, it is recommended that the programme consider only doing IBBS surveys once in 3 years in locations where the estimated number of KP members is greater than 1000, and where interventions are in place. This is in keeping with updated guidance on second generation surveillance for locations with low level epidemics⁴.

HIV Case Reporting

Reported HIV cases come from a number of different types of testing sites/sources

- STD, ANC and TB patients are all tested routinely
- Provider initiated testing is done when physicians suspect HIV or when there are clinical signs that are suggestive of HIV
- Screening for HIV is required before some types of medical/surgical procedures
- Screening for HIV is required for work visas for some foreign countries. This accounts for a large number of tests done in Sri Lanka
- Blood donations are screened for HIV
- Some people choose voluntarily to be tested – NGO interventions with KPs encourage this option, and the testing is often done in public sector STD clinics
- Regular sexual partners of people who are diagnosed with HIV are encouraged to be tested
- HIV screening is offered to people in prison

With such a large variety of testing sites and sources, it is a challenge for the NSACP to keep track of the number and profile of people infected (much less those being tested).

However, because all initially positive samples must undergo confirmatory testing at the central lab in Colombo, this is an opportunity for the national programme to collect some data on confirmed positive cases. They are generally able to track information on place of residence, age and sex, and in some cases marital status and occupation. They also try to track information about risk factors and reasons for testing. This information is used to track the mode of transmission of confirmed cases, and to determine prevention priorities.

Issues and Challenges

- One of the challenges of using reported case data to understand modes of transmission is that it does not account for the profile of people being tested, or the fact that those tested do not necessarily reflect those most likely to be infected. Migrants are a case in point. Many migrants undergo HIV screening, so infections among them are more readily detected, even though there is no evidence that their rates of infection are different from the general population. Similarly as pregnant women account for an increasingly large proportion of people being tested over time, women will account for a greater share of detected cases, simply because more of them are being tested.
- HIV prevention priorities in Sri Lanka are determined by HIV prevalence in different populations, and the proportion of reported cases attributable to different modes of transmission. This is somewhat problematic, because prevalence among KPs has consistently stayed very low, and reported cases tend to present a distorted picture of transmission patterns for the reasons just described. Furthermore, although commercial sex is thought to be one of the primary modes of transmission in the country, the HIV case reporting does not track it. Transmission through commercial sex is categorized as “heterosexual sex”. When the reported mode of transmission for the majority of cases is “heterosexual” and there is a lack of evidence that KPs are affected (HSS and IBBS surveys consistently detect very low prevalence in these groups, including FSWs), there is a natural desire to want to expand the prevention focus (e.g. to the general population or youth), rather than focus on populations that are epidemiologically important because of their higher potential for exposure to the virus.

Recommendations

In the future the NSACP should try to improve the system of recording modes of transmission among those being tested in STD clinics (if not in all testing sites), and improve the analysis and dissemination of data in ways that make the issues clear and easily understood by decision makers and programme planners.

- The form that is currently used to provide information on mode of transmission (H1214) is available only for confirmed cases. It uses a field called “reason for testing”, plus information on risk factors to determine modes of transmission. However, the “reason for testing” categories are of limited utility, and information

on risk factors comes from an open-ended question with no standardized responses. Getting people to fill out this form accurately and completely is difficult, particularly in the private sector.

- There is an alternate form “Strategic information on laboratory confirmed HIV infections” that is not formally adopted by the Ministry of Health, but that provides much more comprehensive information. If this form could be used on a routine basis, at least for those who are tested in STD clinics, the results would be very useful. If a high proportion of KPs are tested, this data source could potentially be used as a substitute for HIV sentinel surveillance among KPs. This would be a more timely way to detect an outbreak of HIV, if and when one occurs, than waiting for information from HSS surveys every 2-3 years.

Data use

The analytical use of surveillance data (both active and passive) to understand the drivers and the risk groups is extremely important for guiding further action.

Issues and challenges

- An opportunity to make better use of data through analysis and triangulation is being missed. Several problems were observed in existing reports.
 - The analysis tends not to be driven by key questions, such as “what is the direction and trajectory of the epidemic”, and “what are the epidemic drivers”? The routine data compiled by the epidemiology unit on numbers of confirmed cases by age, sex, reason for testing, and history of migration, which exist in quarterly and annual reports, will not answer these questions without further analysis. As described earlier, lack of analysis can lead to erroneous conclusions, such as the idea that migrants and youth are drivers of the epidemic. These populations may be vulnerable, but they are not drivers of the epidemic.
 - The data come from several sources which are all mixed together, and do not take testing patterns into account.
 - The source of data is often not clear, which makes the information harder to interpret.

Recommendations

- In addition to compiling and reporting routine data, the NSCAP has the important job of analyzing the data on a regular basis in ways that helps answer key questions. Data analysis could be greatly improved if it accounted for testing patterns. At a minimum, the number tested and the number positive should be reported separately by type of testing site.
- In reports, data sources should be fully explained to avoid confusion and misinterpretation.

- More detailed analysis should be performed on the subset of people for whom more complete information is available (i.e. # tested and # positive over time by risk group for CSW, homosexuals/bisexuals, clients of CSW, people who have migrated previously to the Gulf, and people who inject drugs). Western and North-western provinces could also be reported separately since that is where most of the infections come from.
- Reporting data in this way will contribute significantly to the understanding of how the epidemic is progressing.

Summary of the design of the surveillance system

In a low prevalence country, the surveillance system should be able to detect where outbreaks of infections may emerge. In Sri Lanka, the infections are diffused and it is difficult to see any one population that is contributing to infections more than others. Unless Sri Lanka is very different from other countries in Asia, it is unlikely that the country will experience significant spread of HIV in the absence of a concentrated epidemic in one or more KPs. New infections will continue at a slow pace, but these will most likely occur in an ad hoc way, among people who are exposed, or whose partners are exposed to infected foreigners, either at home or while travelling abroad.

In the meantime, the best way for Sri Lanka to keep the potential for an epidemic under control is to be aware of concentrations of people with risky behaviour, and focus on prevention to keep the prevalence low. That means understanding where concentrations of sex workers and MSM with multiple partners exist, as well as people who inject drugs on a regular basis. By following the size estimation recommendations described above, and improving testing coverage and reporting of risk factors, the country will be in a good position to detect outbreaks in KPs, should they occur. Table 2 summarizes surveillance recommendations for Sri Lanka from this mid-term review. These recommendations are valid until such time as HIV prevalence reaches 5% or more in any of the KPs.

Table 2- Surveillance recommendations for Sri Lanka

Surveillance activity	Scope	Frequency
Size estimation of KPs	Initial assessment (rough estimates) in all districts In-depth assessment – where interventions are ongoing/ planned	Every 3 years
HIV sentinel surveillance	In areas with > 1000 KPs	Every 2 years
BSS or IBBS	In areas with > 1000 KPs	Every 2-3 years
HIV case reporting by risk population	In all areas, but strengthened in areas with largest concentrations of KPs	Ongoing

Theme 4- Supportive Environment

Background

This section deals with some of the factors considered as important to promote an enabling environment for the national response to HIV. These factors are considered under the headings - stakeholders, laws and regulations, policy and plans, and socio-cultural environment.

Methodology

The review incorporated a variety of methods combining a desk review (Annex I), key informant interviews (Annex II and Annex IV), group discussions with stakeholders as well as field observations to hotspots of KPs and North Colombo Teaching Hospital, Ragama.

Findings

Stakeholders

People living with HIV

For over a decade PLHIV have been involved at national level with adequate representation in national committees. The three organizations (Lanka+, Positive Women's Network and Positive Hopes Alliance) are Colombo based, but they operate in most parts of the country in keeping with the distribution of PLHIV in the country. There are good working relationships between the national programme and these organizations. At the time of diagnosis patients are informed about these organizations and the contact information is provided. This arrangement ensures that the privacy of patients is maintained.

Healthcare workers

The level of stigma and discrimination appears to be decreasing over the past decade. Though there isn't any reliable scientific evidence to support this claim anecdotal evidence (from healthcare workers and PLWH) indicates this. Unlike in the past there have been no recent reports of healthcare workers refusing to take care of known HIV positives.

The PLWH Stigma Index was translated and used in Sri Lanka in 2010. The publication of the results clearly document the unacceptably high levels of stigma and discrimination experienced by PLWH, but the document fails to describe the methodology adequately – even the number of respondents is not mentioned. There had been no assessment of stigma and discrimination since 2010.

Armed forces

The armed forces and the police collaborate with the national programme in implementing awareness and BCC activities among their staff. There appears to be no coordinating mechanism among the Army, Navy and the Air-force in relation to HIV. None of them have a policy / document dealing with personnel who are HIV positive.

Private sector and community based organizations

The involvement of the private sector in HIV/ AIDS related activities is coordinated by the Lanka Business Coalition on HIV and AIDS (LBCH). The 72 member institutions include almost all the major business organizations in the country. The thrust of activities of LBCH is to raise awareness and change attitudes of their employees. Though a variety of activities had been conducted by LBCH over the last few years the effectiveness of these activities is difficult to assess.

Laws and regulations

Sri Lanka has adequate laws on protecting the fundamental rights of the citizens and is a signatory to several international conventions relevant to PLWH such as the International Covenant on Civil and Political Rights (ICCPR) and the Convention for the Elimination of All Forms of Discrimination against Women (CEDAW). In addition, the National AIDS Policy (section 3.11) explicitly addresses human rights issues of PLWH. This rights based approach to dealing with HIV could be strengthened by including a statement affirming the rights of LGBTs and FSWs. This can be considered a significant omission as the provisions in the penal code and the vagrants ordinance can be considered as infringing the rights of these people.

Penal code (Act No 22 of 1995 – Section 365A)

Under the penal code sexual activity between persons of the same sex is considered an offence. It used to be an offence only for men until 1995, but an amendment introduced to the penal code in 1995 made it an offence for both males and females. There have been no prosecutions under this since 1948, but the existence of these offences gives room for abuse by the authorities and may promote stigma and discrimination.

Vagrants ordinance (Ceylon Legislative Enactments 1956, Chapter 32)

This law is used by the police to arrest FSWs though prostitution is not an offence in Sri Lanka. This ordinance has been recognized as a piece of legislation that needs to be amended, but it continues to remain in the statute books. Every year about 10 to 15 prosecutions are made under this ordinance.

Policy and plans

National AIDS Policy

A comprehensive policy with the two main objectives of preventing HIV transmission and improving the quality of life and care of the affected people is in place.

National HIV Strategic Plan 2013 – 2017

The strategic plan covers all relevant areas. There is an accompanying detailed budgeted annual activity plan.

National policy regarding infected healthcare workers

There is no policy regarding HIV (and other blood borne infections like Hep B and Hep C) infected healthcare workers. With increasing numbers of affected individuals this should be considered as a priority.

Socio cultural environment

Reproductive health education

The education sector has included comprehensive reproductive health education into the school curriculum for children in grades seven to eleven. But, the actual delivery of the content remains unsatisfactory as many teachers still feel uncomfortable in teaching the content. This is recognized by the education and school health authorities and concerted effort is being made by the authorities to remedy the situation.

Condom promotion

There have been innovative and culturally sensitive condom promotion campaigns in Sri Lanka in the past. But even now there is substantial opposition (at least that is how it is perceived by the authorities) to condom promotion over mass media. In addition to this perceived opposition the high cost involved in conducting a campaign over the mass media also is a reason for the absence of a concerted condom promotion campaign

Summary of achievements

- Participation of the positive community in HIV related activities such as planning, monitoring and evaluation of programmes.
- Assessment of stigma and discrimination using the translated PLWH stigma index was carried out in 2010
- Good working relationship between the NSACP and the other stakeholders
- Rights based approach to health - Right to Health Module to train medical staff and students. This is also used for the diploma in venereology trainees.
- Well documented national AIDS policy and strategic plans including budgeted detailed activity plan.
- Inclusion of reproductive health in the school curriculum from grade seven (12 year olds).
- Training of healthcare staff (STD and other staff) by NSACP under GF on stigma and discrimination against PLWH, FSW and LGBT communities
- Training of Police officers on HIV related laws and regulations

Challenges

- ‘Culture of dependency’ within the HIV affected community and their organizations. HIV is considered as a chronic disease now, but most positive people feel that they have got a terminal illness. The organizations representing positive people and risk groups do not appear to have plans for their sustainability.
- PLHW stigma index was translated and used in 2010, but there had been no assessment of stigma and discrimination after that. The assessment of stigma and discrimination appears to be a special project activity.
- Continued criminalization of sexual activity between members of the same sex is likely to marginalize these individuals and promote stigma and discrimination.
- Continued prosecutions under the vagrants ordinance exposes FSWs to abuse by law enforcement authorities.
- Implementing the reproductive health curriculum in schools is a major challenge as the teachers are unable to do this at the moment. One of the possible reasons for this is that reproductive health is not included in the basic training of teachers
- Ensuring that the national plans are based on local requirements rather than donor agenda (funding for media campaigns targeting the general population – reproductive health)
- Lack of data describing the current local epidemic
- Rationale for admitting HIV patients to IDH (hospitalised for other reasons and newly diagnosed as HIV positive as well as known positives with complications)
- Rights of negative partners (especially marital partners) and other negatives
- Absence of policy on testing immigrants

Recommendations

- Further empower the positive community - make them self-reliant; sustainability of their organizations. This could be achieved by affording them greater partnership in relevant activities and engaging them as a resource in activities targeted at the positive community.
- Institutionalize regular (at least biennial) assessment of stigma and discrimination encountered by PLHW and risk groups in order to assess trends and take measures to reduce stigma and discrimination.
- Decriminalize sexual activity between members of the same sex and bring in appropriate amendments to the vagrants ordinance. The subcommittee on prevention and multi-sector coordination should take the responsibility to advocate for these changes
- Non-teachers to implement – to enlist the services of medical officers of health and child protection authorities.
- Ensure appropriate and transparent use of local data in developing national plans (more detailed analysis of available data on HIV positives).
- Develop guidelines on transfer of HIV patients to IDH

- Develop guidelines regarding dealing with positives who refuse to bring in their partners for testing.
 - Develop policy regarding positive healthcare workers. This should include HIV as well as other blood borne infections such as hepatitis B and C.
 - Develop policy on testing immigrants (returning nationals and foreign workers)
-

Theme 5- Health Systems Strengthening

Background

A "health system" is described as all of the organizations, institutions, resources, and the people whose primary purpose is to improve health. Additional emphasis is placed on health systems as the means to deliver effective and affordable care (WHO, 2010). GFATM (2009) shows that strengthening the health system will facilitate meeting Millennium Development Goals and help achieve increased health equity. To provide a responsive, financially fair health system which treats people with respect and dignity, the system needs staff, funds, information, supplies, transport, communications, and overall guidance and direction.

When a health system is to be strengthened one should look at the system inputs, processes, outputs and outcomes (Figure 4), understand whether there are gaps in access, quality and utilization of services for reaching the programme goals as well as whether a mechanism is in place for monitoring and evaluation⁵.

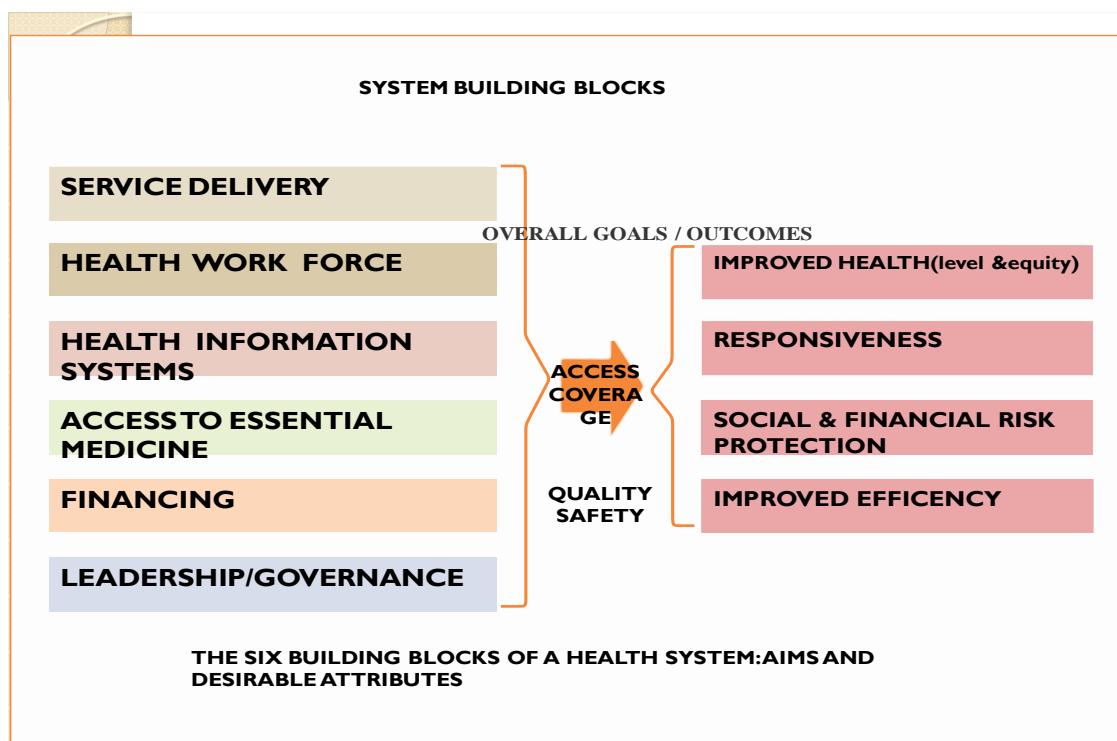


Figure 4- The six building blocks of a health system, aims and desirable attributes

⁵ The Global Fund, 2009, *Monitoring and Evaluation Toolkit: HIV, Tuberculosis and Malaria and Health Systems Strengthening*, http://www.theglobalfund.org/documents/me/M_E_Toolkit_P2-HSS_en.pdf

Methodology

The review incorporated a variety of methods combining a desk review (Annex I), key informant interviews with key government officials, NGO, group discussions with stakeholders as well as beneficiaries of services, field observations (IDH Hospital, Kandy Hospital, Galle, Hikkaduwa etc), client interviews to understand satisfaction as well as to get their opinion on services provided (Annex V).

Findings and Recommendations

Health Services Infrastructure

After 30 years of war Killinochchi, Mannar and Batticaloa are in the process of getting STD clinics. There are 30 clinics functioning in the country. The following issues were identified in a survey of clinics in 2014.

- Only nine clinics out of 30 had been built according to the stipulated guidelines.
- The model plan for STD clinics was introduced only in early 2000. Since then STD clinics have been built adhering to the plan.
- All STD clinics had a separate consultation and examination room but only 13 clinics had a room for a pharmacy. In the rest, nurses dispensed drugs.
- 4 clinics needed a reception and waiting area.
- Some clinics were not spacious enough to accommodate all patients visiting the clinic.
- 5 clinics did not have a bleeding and injection room
- 8 clinics lacked an area for counselling
- 3 clinics did not have a laboratory
- 7 clinics were without toilets and the patients used the hospital OPD toilets
- 3 clinics had common toilets for male and females.
- 13 clinics were in need of a record room and 11 needed a store room.
- 3 clinics needed a system of waste disposal.

Moneragala STD clinic was conducted in a room in the chest clinic and is in urgent need of a new clinic. Ragama, Kauthara and Gampaha STD clinics were functioning in tertiary hospitals and were not in a state to cater to the demand of the patients because of overcrowding with limited space. Trincomalee STD clinic needs immediate repairs.

From the existing 30 clinics six were without vehicles (Jaffna, Kalmunai, Moneragala, Polonnaruwa, Trincomalee, Vavuniya).

STD clinics provide the following services: condom distribution, screening for syphilis, screening for HIV, HIV testing and counselling, and partner notification (contact tracing). The services may depend on staff availability. For example, contact tracing at field level may not happen if there is no public health inspectors (PHI).

Achievements

- There are 30 STD clinics island wide
- The overall condition of pharmacy and treatment sites is good.
- The IDH and Kandy pharmacies are well designed and have sufficient space to manage the current ARVs needs, and in fact a larger ARV demand could be covered in the same space.
- All storages visited in Kandy / IDH and Colombo are secured and well managed by the pharmacists.
- All clinics are equipped with a consultation and examination room where privacy is preserved
- Twenty four (89%) of clinics had a laboratory and a correct waste disposal system and infection control management system.

Issues and challenges

- STD /HIV AIDS services are not equally distributed around the country especially in the North and East.
- Services in Mullativu, Mannar and Kilinochchci districts are inadequate.
- Not all clinics are set up according to the plan under the WB HIV prevention project 2000-2005, including the central STD clinic
- Some clinics are overcrowded due to lack of space. There is a lack of understanding of the storage of essential medicines.
- There should be $3m^2$ of storage space available for every one $1m^2$ of space actually occupied by products, including stores at NSACP.
- There are infrastructure and human resource gaps in most parts of the Island.

Recommendations

- Careful forecasting at the central and lower level is essential to coordinate sharing of information and data with partners to avoid procurement overlap or duplication. It should be a “best practice” to create a National Quantification Working Group as working in teams will help avoid using limited assumptions. The Group should be able to collect and analyze data and conduct quantification and forecasting exercises.
- Different forecasting approaches should be used for different levels of the supply chain. Treatment sites should use a consumption-based approach because of the limited population size and the short procurement horizon, while the National Quantification Working Group should use a morbidity approach and compare with consumption data.
- Strict monitoring of inventory levels and secure transportation to storage facilities should play a key role in streamlining the supply and, thus, in maximizing the numbers of patients that the programme enrolls for ART.
- Training on good storage of essential medicines and other health commodities should be conducted for all STD pharmacists.

- The Colombo NSACP STD Pharmacy should not be maintained as it is. Either the NSACP should find a proper location with sufficient space or the main part of their procured ARVs should be stored at the Medical Supplies Division (MSD) warehouses, located within walking distance from NSACP. Due to the low volume of ARVs this should be acceptable to MSD.
- The programme should plan to have a predetermined level of buffer stock to help prevent stock-outs. STD clinics that are near NSACP or MSD should not have a high buffer stock, as the STD Colombo pharmacy can be reached easily. This may ease the burden at the central level. Clinics that are further away may need to keep a higher stock.
- A set of standard operational procedures (SOPs) should be written for every step of the inventory and distribution management.
- STD /HIV services should be continued with available resources in Killonochchi, Mannar and Batticaloa districts until the clinic buildings are completed.
- Non-Qualified volunteer staff should be recruited and provided with financial support to in North and East to reach vulnerable populations under HSS.
- To ensure uninterrupted, safe and effective ART service provision, the programmes should conduct a complete ART Storage Facilities and Treatment Sites Assessment for the 30 STD clinics in Sri Lanka.
- Transport facilities should be provided to facilitate outreach to all STD clinics.

Health work force

Only six periphery clinics had consultants (Anuradhapura, Kalubowila, Kalutara, Kandy, Mahamodara, Ragama). Anuradhapura had a consultant visiting the clinic in Polonnaruwa once a month. There was no consultant Venerologist in six of the nine provinces (Uva, Sabaragamuwa, North Western, Northern and Eastern provinces). At least one medical officer serving in the STD clinic had been given in-depth training on STD and HIV. While discussing with the district administration it was noted that the routine transfer scheme affects the smooth running of clinics. Twenty three clinics had nurses with special training in STDs whereas Negombo and NuwaraEliya did not have nurses in the clinics. While there were four nurses in Polonnaruwa STD clinic, none had undergone training. The nurse in Moneragala also needed training (Figure 5).

Twenty three clinics have PHI's trained in STDs and HIV, the PHI in Mahamodara had not been trained and three clinics (Wathupitiwala Kalubowila, Negombo) had no PHI in the STD clinic.

Sri Lanka is based on a well-defined primary health care system and PHIs play a major role in it. PHIs are involved in epidemiological surveillance and water and sanitation as their primary role. They are trained to monitor disease incidence, detect epidemics early and take measures to prevent the spread of disease (NIHS 2003). They also help identify KPs in the

field, visit sex work places, do contact tracing, identify treatment defaulters, promote condoms, do counselling, and keep records.

There are 23 Medical Laboratory Technicians working in clinics island-wide. Out of them only three had not had special training for their job at the STD clinic. There are 23 microscopists trained. There are seven clinics without a Medical Laboratory Technician. There are four clinics (Jaffna, Kalubowila, Matale, Moneragala) without either a Medical Laboratory Technician or a microscopist.

All health work forces have been given training on STDs and HIV. Training to all main staff on counselling will be essential. Dialog with the Directorate of Education Training and Research of the Ministry of Health on including HIV/AIDS in all curriculums is needed to achieve goals and outcomes.

According to patients, stigma among the health workers in STD clinics is negligible.

Achievements

- At least one Medical Officer with special training in STD/HIV per clinic
- Most of the staff in STD clinics are being given training to work in the clinic
- Stigma is minimal among staff working in STD clinics
- Dedicated staff at all levels are extending services to the field level
- NGO collaboration is helping to identify KPs, bring them to the clinics, and distribute condoms to them
- HIV/AIDS is included in training curricula for MOs, Public Health Inspectors, nurses, and Medical Laboratory Technicians

Issues and challenges

- Some areas are underserved with respect to HIV/STI services
- Transfer / rapid turnover of trained staff
- Stigma among the laboratory staff outside the campaign hinders the smooth functioning when outside collaboration is needed (e.g. when there is equipment failure)
- Limited support from NGOs for testing during equipment failure due to limited funding to the PLHA organisations

Recommendations

- Staff vacancies at STD clinics to be filled
- Provide incentives for working in geographically difficult areas
- Make training compulsory for all staff working in STD clinics
- Dialog with Directorate of Education Training and Research of Ministry of Health about including HIV/AIDS in all curriculums

- Recognize exemplary health workers and showcase their interventions and innovations at national and international level

Human Resource Distribution and ART facility by STD Clinics

Province	No	District	Clinic	ART	Consultant	MO	Nurse	PHI	MLT	Microscopist
central	1	Nuwareliya	Yes			0	0	1	1	1
	2	Kandy	Yes	✓	Yes	4	4	1	2	3
	3	Matale	Yes			2	1	1	0	1
Eastern	4	Ampara	Yes			2	1	1	1	0
	5	Batticaloa	Yes			1	0	0	0	0
	6	Trincomalee	Yes			1	1	1	1	0
Northern	7	Vavuniya	Yes			1	1	1	1	0
	8	Jaffna	Yes	✓		2	1	1	0	0
	9	Mullativu								
	10	Mannar								
	11	Kilinochchi								
North central	12	Anuradhapura	Yes	✓	yes	1	1	1	1	1
	13	Polonnaruwa	Yes	✓		2	4	1	1	0
North western	14	Kurunegala	Yes	✓		2	3	2	1	1
	15	Puthalam	Yes			2	2	1	1	1
Southern	16	Hambanthota	Yes			1	2	1	2	0
	17	Galle	Yes	✓	Yes	1	2	1	1	1
	18	Mathara	Yes			2	4	1	1	1
Sabaragamuwa	19	Kegalle	Yes			2	2	1	1	1
	20	Rathnapura	Yes	✓		3	2	1	1	1
Uva	21	Badulla	Yes			1	1	1	1	1
	22	Monaragala	Yes			1	1	1	0	1
Western	23	Colombo	Yes	✓		N	S	A	C	P
	24	Kalubovila	Yes	✓	Yes	2	2	0	0	1
	25	Ragama	Yes	✓	Yes	3	2	1	1	2
		Gampaha	Yes	✓		2	1	1	1	1
		Wathpitiwala	Yes			1	1	0	0	1
		Kaluthara	Yes	✓	Yes	2	2	1	1	2

Figure 5- Distribution of human resources and ART facilities in Sri Lanka

Access to Essential Medicine

Normal drugs such as antibiotics, antifungal are supplied through the Sri Lankan health system. ART centers started in 2004 and there are now 12 centers (7 permanent and 5 branch) plus IDH that dispense ART (Figure 5).

Permanent ART clinics: 1.Anuradhapura 2.Colombo 3. Kalutara 4.Kandy 5.Kalubowila, 6.Mahamodara 7. Ragama 8.IDH

Branch (once a month): 1.Gampaha 2.Jaffna 3. Kurunegala 4. Polonnaruwa, 5. Rathnapura ART treatment is provided only in Jaffna STD clinic in Northern Province and none in Eastern and Uva Provinces. However, from the 25 districts only eleven districts are without ART facilities (Badulla, Monaragala, Hambanthota, Matara, Vavuniya, Mullativu, Mannar, Kilinochchi, Ampara, Batticaloa, Trincomalee).

Among the 30 STD clinics in Sri Lanka, there are 13 STD clinics where ARVs are distributed. The evaluation team members studying the HSS visited 3 of them which represent 80% of the total ARVs storage and distribution; Colombo STD Clinic located in NSACP, the clinic located in the Infectious Disease Hospital (6km from NSACP in Colombo) and the Kandy STD Clinic located in Kandy Hospital.

Achievements

- There are 13 ART centres, 8 permanent and 5 branch (functioning once a month)
- Patients have never been deprived of ART, changed combinations or been issued drugs for shorter periods when there are impending stock outs
- Government procurement entity exists SPC (State Pharmaceutical Cooperation)

Issues and Challenges

- Need to scale up ART provision at district level based on the requirement (one per district)
- There is a risk of ARV and condoms stock-outs because of inadequate buffer stocks
- National ART guidelines are not yet being fully implemented
- The concept of VPP (volunteer pool procurement) is not understood by the majority of staff at NSACP
- Out of the 21 ARV drugs used, only 6 are registered, thus “no objection” letters should be issued for each drug / shipment
- Procurement procedures for ARV done through GFATM and VPP are perceived as cumbersome
- Procurement lead time with SPC is almost a year which does not provide for flexibility in case of uncertainties or product phase-out.
- No ARVs quality control mechanism is in place.
- No ARVs quality assurance mechanism along the supply chain is in place
- Coordination between the GFATM project team and NSACP is poor

Recommendations

- Streamlining the availability of drugs, condoms etc. and ensuring of rational buffer stocks
- More coordination between the GFATM Colombo and NSACP
- SPC should be considered for procurement of drugs and devices and MSD for instruments. This will be a more efficient use of valuable staff time of NSACP.
- NSACP and SPC should follow donors' rules and regulations regarding QA/QC and/or the List of Essential Medicines during the Procurement and Supply Chain Management process.
- Programme managers should ensure that procurement contracts are flexible and should allow for multiple shipments and modifications of order quantities (+/-25%) responding to uncertainties, fluctuations, product phase-out in demand during initial programme expansion.
- The PR should strengthen procedures related to registration and importation of ARVs drugs by including consultation with the national regulatory authority as part of the procurement evaluation and tender process. This would help minimize

potential delays related to registration and importation, and avoid potential treatment interruption at the patient level.

- Quality control systems should be set up in Sri Lanka. The NSACP should liaise with SPC which has a list of WHO prequalified or ISO 17025 laboratories all over the world. Moreover, SPC can obtain preferential prices for such tests.
- A national quality assurance plan is also recommended.

Access to Laboratory

When District Administrators were interviewed they agreed that screening of pregnant mothers is now taking place in a smooth manner, but they are concerned about non-availability of testing for KPs.

Only one CD4 machine is available and it is at the NSACP. In the periphery, patients are given appointments. When they do not come they are contacted by phone by the PHI and if traced, another date is given. All blood collected in the periphery clinics is transported to Colombo NSACP. A viral load PCR based test is done at 6 months and 1 year. Only one machine is available in the country and it is not functioning because of lack of test kits due to the product not being registered in Sri Lanka. Registering the product when the number of tests is so small is not cost effective. This has been the case for the past two years but processing for registration is now underway.

There is only one biochemistry analyzer at NSACP which has been out of order for two months. Patients have been paying to get tests done in private sector settings, however, when asked, some were unhappy about it. When asked why arrangements could not be made for the testing to be done in a nearby hospital it was understood that the request had been made but had been refused due to stigma of HIV.

Achievements

- All patients accessing STD services are offered counselling and testing at the STD clinics.
- CD4 count is checked at initiation of treatment and every 6 months
- It is reported that peripheral clinics draw the blood samples and send them routinely and reliably to NSACP
- Viral loads are done six months after initiation and annually
- Emails are sent to clinicians regularly from NSACP to provide updated test results
- The HIV testing coverage in the TB programme has increased from below 50% to nearly 80%
- 20 blood banks have HIV testing facilities

Issues and challenges

- Rapid testing is not available routinely
- There is only one CD4 machine (FACS Count) and no back up machine, no reagents for viral load since October 2014 and delays in procurement. The biochemistry analyzer has been out of order since December 2014
- KPs (MSMs, FSWs, PWIDs) and other vulnerable populations can access HIV testing only when they attend STD clinics
- ART resistance testing is not available yet

Recommendations

- Back up CD4, viral load and biochemistry machines should be purchased. CD4 and other laboratory equipment reagents and test kits should be procured. Total ownership cost (maintenance and training) should be procured for new equipment.
- Since test kits and reagents have a short shelf-life , forecasting and indenting needs to be done frequently and according to actual consumption. A forecasting exercise should be conducted every year with a strong procurement delivery schedule. The forecasting should be revised quarterly.
- The NSACP should ensure that SPC is responsive in changing quantities when needed, as HIV test kit procurement is complex and uncertain.
- Procuring HIV test kits and reagents includes also procuring non-health products such as slides, tubes, etc. NSACP should procure such products to avoid shortages.
- The GFATM Colombo project office should work closely with NSACP to deliver more efficient services
- The laboratory should support regular outreach programme for HTC for KPs (such as MSMs, FSWs, PWIDs, BB) and other vulnerable populations (e.g. migrant workers, prisoners and beach boys in Sri Lanka)
- All TB patients should be offered PIT (Provider Initiated Testing)

Management Information System

The Reporting system of NSACP has two levels. The first level is the reporting unit and the second level is the Strategic Information Management unit of NSACP (National HIV Monitoring and Evaluation plan 2013) (Figure 6).

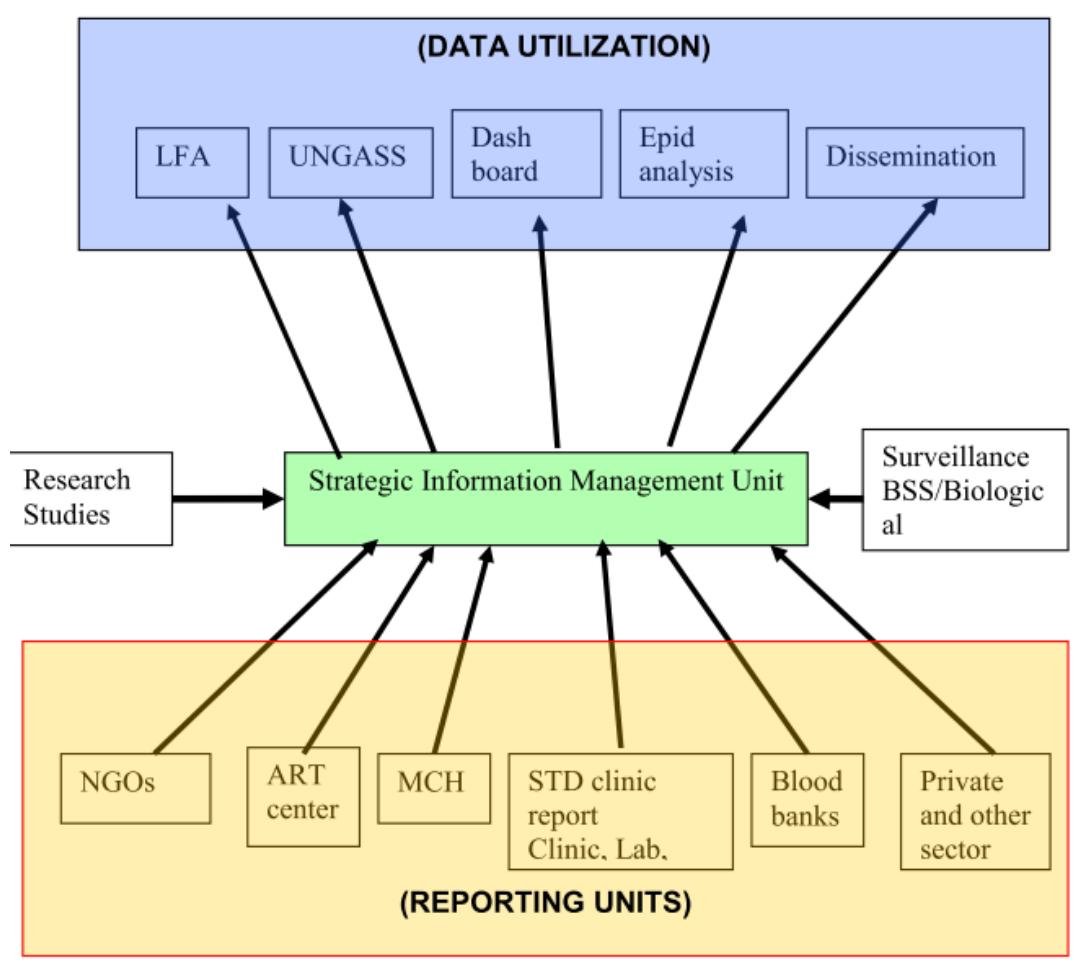


Figure 6- Data reporting systems of NSACP

Surveillance and Notification

There are several surveillance procedures in Sri Lanka; Passive surveillance, active surveillance, sentinel site surveillance, surveillance based on secondary data analysis, special surveillance surveys and investigation and epidemiological investigation of outbreaks. The surveillance activities of communicable diseases are carried out by the PHI. PHIs carry out a passive surveillance system according to the notification system which is enforced by law (The Quarantine and Prevention of Diseases Ordinance Gazette No: 7481 of 1925 August 28). The lists of notifiable diseases are distributed to all health care personnel regularly.

The protocol normally followed when a patient with a notifiable disease is seen by a doctor is to fill out a notification form and send it to the MOH office where the patient is residing. It has been suggested by some that the notification should be sent even on suspicion of the disease. In the instance of an incoming patient the details are entered in the ward notification register by the ward staff and the notification is sent. On receiving the notification form , the MOH Office hands it over to the relevant PHI where the patient is residing. The PHI visits the patient at his residence and confirms the disease. Not only does the PHI visit houses to trace those with notifiable diseases, but in his visits he also

investigates whether the patient is taking proper treatment and if so encourages continued treatment. The PHI also guides the person to proper treatment, locates the potential source of infection and takes control measures to prevent further spread in the community.

This method of notification is not practiced with HIV/AIDs due to the stigma attached and the confidentiality needed. However, this mechanism is robust and provides dividends to control many communicable diseases spread in the country. The notification used in other communicable diseases may not be suitable as it is, but with appropriate adjustment and modification it can be adopted by the NSACP to do contact tracing, help avoid defaulting and promote adherence to ART treatment while keeping confidentiality as a priority.

One PHI encountered during the review was accompanying the consultant to places where sex workers were, helping the consultant to draw blood and dispensing drugs as needed. This PHI was maintaining a special field register where services given to FSWs and MSM living with HIV could be identified. He noted with gratitude the help he gets from the NGO workers to provide quality care to those who need it. When asked he pointed out that the role of the NGO's is huge because the peer educators have only that particular work to be completed whereas government health workers have multiple roles to play.

Achievements

- The NSACP website <http://www.aidscontrol.gov.lk> provides manuals and guidelines
- There is regular data collection and dissemination
- The data being collected are used for planning

Issues and Challenges

- There are difficulties doing contact tracing because of confidentiality and ethical issues
- There are shortages of either computers, internet facilities or both in some clinics

Recommendations

- Strategic mechanism for contact tracing, avoiding defaulting and adherence to ART treatment
- The notification used in other communicable diseases may not be suitable as it is, but with appropriate adjustment and modification could be adopted by the NSACP to do contact tracing, avoid defaulting and promote adherence to ART treatment while continuing to prioritize confidentiality.
- The current paper health management information system should be standardized for the whole country, before any computerization. NSACP should ensure that proper computer, printer, UPS and related stationeries are available and in good condition in each of the ART Centres.

- Strong training on Internet (use, security, etc.), Computer, and the use of Excel, Word and PowerPoint should be conducted.

Leadership and Governance

The National Strategic Plan (2013-2017) is to be implemented by all sectors of government and civil society, under the technical guidance of the NSACP with high level leadership from the National AIDS Committee to accelerate the scale up of HIV testing, prevention, care and treatment services and ensure collecting robust strategic information to monitor and guide the national response to the HIV epidemic. Behaviour change communication to address risky sexual behaviour is needed and the PHC system can be useful in this regard.

Achievements

- A National AIDS Policy is in place
- There is a National AIDS Committee (NAC) policy making body chaired by the Secretary of the Ministry of Health
- A communicable diseases advisory committee meets under the DG
- There is a national HIV/AIDS Strategic Plan for 2013-2017
- There are effective systems under the Regional Director of Health Services in the districts
- There is NGO collaboration
- Supportive supervision and quality assurance is in place

Issues and Challenges

- Target 7 of Millennium Development Goal 6 to halt and reverse the spread of HIV/AIDS has not been achieved, accelerated action in behaviour change is needed
- NSACP operates under the central government, and provincial STD clinics operate under the provincial setup. There is not much collaboration between the national and peripheral administration

Recommendations

- More collaboration between the National and District level administration
(Other recommendations are included to the prevention section).

Financing

A unique position is held by Sri Lanka in South Asia as one of the first of the developing nations to provide universal health free of charge, free education, strong gender equality and better opportunities for social mobility. Since its independence, successive governments have implemented welfare-oriented policies and programmes which have allowed Sri Lanka to achieve relatively high standards of social and health development in comparison with countries of similar levels of economic development. As a result , the country has made significant improvements in social welfare, both in the development of

public health care and education systems. The attainment by Sri Lanka of a high Human Development Index (HDI=0.74) with a life expectancy at birth of 72.5 years, and a literacy rate of over 90%, has thus been a well celebrated success for a less developed country.

The Sri Lankan Government supports a policy of universal health services for all its citizens. Ensuring financial sustainability for the health sector to deliver health care with quality while protecting equity of access, is an important challenge. The national health sector programme approach was adopted in 2003 to enhance the financial sustainability of the health care system by the government. Measures were introduced which aimed to address regional disparities in access, rationalize investments and services, encourage adoption of health insurance, and strengthen hospital based management systems. Sri Lanka's health care system does well by international and regional standards in various dimensions of equity, in particular its targeting of public expenditures to the poor, and the effectiveness of public expenditure in protecting households against the impoverishing impacts of catastrophic illness. Further improvements in this area will depend on increasing the share of public expenditure in total health system financing so as to reduce the role of out-of-pocket payments (IHP. 2009)⁶.

Even though the government has always supported a policy of providing universal health services for all its citizens, actual government expenditure cannot meet the financial requirements of health needs. Tax-based financing is currently insufficient and there needs to be greater emphasis on social health insurance. The rapid development of technology will bring deficiencies in health financing into ever greater perspective.

Achievements

- Government programme helped by many stakeholders
- Much strengthening of services has taken place

Issues and challenges

- No proper delegation of financial authority to the Director NSACP from GFATM
- Procurement specialist officer of GFATM project not liaising efficiently with NSACP and vice versa
- No NSACP Procurement and Supply Chain Management professional to act as counterpart.

Recommendations

- More GFATM support to PR 1

⁶ Institute for Health Policy. 2009. *National Health Expenditures: Sri Lanka Health Accounts 1990–2006, IHP Health Expenditure Series Number 1*. Colombo.

- Procurement to be given to SPC and MSD

At the national level, the policy should address how purchase of ARV drugs and maintenance of the ART programme will be financed in the long term and should include a variety of financing strategies to achieve the policies. The policy should balance financial requirements against other goals, including those of enhancing equitable access and ensuring that implementation of an ART programme does not divert budgetary allocation away from other health priorities, such as prevention, primary care and basic HIV care.

If Sri Lanka does not have sufficient financial resources to procure a lifetime supply of ARV drugs for all people who are clinically eligible for treatment, the programme's primary goals should be to ensure procurement of other funding sources to rapidly accelerate the availability of ART services and ARV drugs, and to reduce the gap between demand and supply.

Conclusions and Over-arching Recommendations

Epidemic Focus

- Sri Lanka has a low level epidemic and the response must be focused on populations that have the greatest epidemic potential. These include FSWs and MSM, based on the estimated sizes of the populations, and their levels of risky behaviour.
- At the moment drug users have low epidemic potential, but if more DUs transition to injecting, the potential would increase. Focus therefore needs to be on preventing DUs from switching to injecting.
- Although overseas migrants are vulnerable, they are not a population that is driving the epidemic.
- Prisoners have behavioural risks that are associated with being members of KPs, but as long as there is no HIV circulating in those populations, there is no excess risk for prisoners at the point. However, since a large proportion of prisoners are members of KPs, the prison sites can be considered as a subset of prevention with KPs because it is a place to reach them. Only those prisons with large numbers of KPs should be prioritized.
- Youth, and the general population are not drivers of the epidemic and do not need to be the target of any prevention campaigns beyond general awareness.

Prevention

- FSWs and MSM are the KPs most in need of interventions. The interventions should be geared toward keeping the prevalence in those populations low.
- Before finalizing plans for continued programming, the current intervention model needs to be revisited, and inadequacies that have already been identified need to be addressed. Some important topics to assess include:
 - How well the model for escorting KP members to STD clinics for HIV testing is working
 - The need for alternative HTC models, possibly to include testing at NGO sites or at NGO controlled mobile sites (either or both models to include assistance of trained counsellors from STD clinic)
 - The need for community component such as drop-in center
 - Complete rethinking of interventions for DUs (which currently do not address harm reduction needs).
- Interventions for FSWs and MSM should prioritize those districts that account for approximately 60-80% of KPs.
 - For FSWs, roughly 60% can be covered by focusing on 4 districts in 3 provinces, and 80% can be covered by extending coverage to an additional 3-4 provinces.

- For MSM, 60% can be covered by focusing on Western province alone. To reach 80% the intervention focus would need to extend into 3-4 additional provinces
- National targets should be considered as crude numbers that help establish resource needs and prioritize intervention priorities.
- Once a final set of districts is prioritized for interventions, social mapping should take place to assist with programme planning and for specific local evidence based target setting. Targets should take expected population turnover into account.

Diagnosis, Treatment and Care

HIV Testing and Counselling

- Expanded access to testing for KPs through alternate models of point-of-care testing including expanding capacity for HIV testing at NGO sites
- Training for counselors at NGOs
- Tracking of information on risk profiles of those being tested – to become integral part of case reporting (see S.I. section)

Care and ART

- Backup CD4, viral load and a biochemistry machine to be placed at NSACP
- CD4 testing capability to be expanded to 8 sites which currently dispense ART
- Ongoing training of physicians involved in HIV care should be planned

PMTCT

- HTC offered to all pregnant women in all districts to prevent maternal to child transmission. Screening through rapid testing to be made available at ANC sites.

Strategic Information

- Streamline key population size estimation activities using a two-part process where
 - part one produces rough estimates to establish overall national level resource needs and prioritize geographic locations for the response
 - part two produces detailed size estimates in areas prioritized for interventions, to be used primarily for local target setting
- Reduce HIV sentinel surveillance to include only FSWs, MSM, DUs in locations with large numbers of key population members only (e.g. > 1000). Eliminate TB patients and STD clinic patients because those groups are tested routinely. Eliminate service men because they are unlikely to experience an HIV epidemic in the absence of a concentrated epidemic among any KPs.
- Conduct IBBS surveys only in locations Improve the way case report data is collected so that it can be used to understand drivers of the epidemic and to track the epidemic among KPs

- Improve the system of recording mode of transmission of reported cases in STD clinics and NGO based HTC sites using modified strategic information format.
- Make better use of case report data through more strategic approach to analysis of case report data.
- Perform analysis to answer key questions on a regular basis (as opposed to just reporting statistics)
- Analyze data separately by type of testing site and for STD and HTC sites, focus on tracking both numerators (# positive) and denominators (# tested) separately for each key population group.

Supportive Environment

- Decriminalize sexual activity between members of the same sex and bring in appropriate amendments to the vagrants ordinance. The subcommittee on prevention and multi-sector coordination should take the responsibility to advocate for these changes
- Further empower the positive community to improve self-reliance and facilitate sustainability of their organizations. This could be achieved by affording them greater partnership in relevant activities and engaging them as a resource in activities targeted at the positive community.

Health Systems Strengthening

Service delivery

- Commence STD /HIV services with available resources in Killonochchi, Mannar and Batticaloa districts until the clinic buildings are completed
- Fill staff vacancies at STD clinics and make training compulsory for all staff working in STD clinics
- Provide training on Supply Chain Management (receipt, storage and distribution of ARVs and QA/QC) as well as other training to ensure that HIV/AIDS is well understood.

Essential medicines

- SPC to be considered for procurement of drugs and devices to facilitate efficient use of valuable staff time of NSACP

Improving ART

- Strengthen procedures for procuring ARVs, specifically those related to registration and importation of ARV drugs
- Find a proper location with sufficient space to store ARVs. Keeping them in the Colombo NSACP STD pharmacy is not suitable. Discuss central and district level storing capacities with MSD

- Ensure adequate buffer stocks of ARV strategically located in specific locations to prevent stock-out in peripheral ARV clinics.
- Ensure that all STD clinics have received computer, printer, UPS and stationary so that the inventory and distribution management tools can be computerized.
- Implement an ARV Quality Assurance and Control strategy
- plan for a PSM professional team in NSACP

Laboratory services

- Back up CD4 (including tests, reagents and provision for maintenance), viral load and a biochemistry machine to be purchased and kept at the NSACP.
- Strengthening of opportunistic infection diagnosis

Health information system

- Design strategic mechanism for contact tracing, and ensuring ART adherence

Leadership and governance

- Improve collaboration between the national and district level administrations in national STD/AIDS response

Finances

- Plan for continuation of interventions that reach KPs in the community at the end of GFATM funds.
- Plan for ensuring funding sources to cover the patients in need of ART

Annexes

Annex I -Publications and documents reviewed in MTR

Document category	Document Inventory for the MTR 2015, National STD/IDS Control Programme, Sri Lanka
NSP	National Strategic Plan 2007-2011
NSP	National Strategic Plan 2013-2017
External reviews	External Review of the Sri Lanka Response to HIV and STI
External reviews	Review of the National Response to STI and HIV
External reviews	Summary of the External Review-Main Findings
Project work plans/Budgets	GFATM Round 9, phase II PR1 MOH plan
Project work plans/Budgets	GFATM Round 9, phase II PR2 FPA plan
Project work plans/Budgets	GFATM Round 9, phase I PR2 Sarvodaya plan
Project work plans/Budgets	PMTCT work plan and budget for the world bank funding
Annual reports	Annual Report of the NSACP – 2013
Annual reports	Annual Report of the NSACP – 2012
Surveys	The Post Intervention KAP Study-Plantation Workers on HIV/AIDS 2014
Surveys	KAP Survey among the gay community, gay identified men, and Men who have Sex with men in Sri Lanka
Surveys	Syphilis Serology Quality Assessment 2012
Population size estimation	National size estimation of MARPs in Sri Lanka 2013
Population size estimation	Report on pop size estimation-2010
Population size estimation	Estimation and projections for Sri Lanka for the year 2012 workshop done in 2013 in BBK
Population size estimation	Report on HIV estimates and projections 2009, Sri Lanka
Behavioural surveillance	Behaviour Surveillance Report-2007
Behavioural surveillance	Integrated biological and behavioural surveillance (IBBS) 2014
HIV Sero-surveys	HIV Sentinel Sero-surveillance Report-2011
HIV Sero-surveys	HIV Sero-prevalence Study among Inmates of Welikada Prison-2011
HIV Sero-surveys	HIV Sentinel Sero-surveillance Report-2009
HIV Sero-surveys	HIV Sentinel-Sero-surveillance Report-2008
Monitoring and evaluation	National HIV MandE Plan 2013-2017(NEW)
Policy	National Health Policy
Policy	National HIV/AIDS policy
Policy	National policy on HIV and AIDS in the world of work in Sri Lanka
Policy	National labour and migration policy of Sri Lanka
Policy	National maternal and child health policy
Policy	Report of the policy, legal and ethical subcommittee
DHS Surveys	Demographic and Health Survey 2006/07
Finance	National AIDS Spending Assessment
Finance	Economic and Social Statistics of Sri Lanka 2014
Stigma related	People living with HIV stigma index Sri Lanka, November 2010
International reporting	Universal access Sri Lanka report 2011
International reporting	UNGASS report 2008/2009
International reporting	Global AIDS Response Progress Report (GARPR) mid 2014

Annex II- In-depth interviews conducted in the thematic area of prevention and the thematic area supportive environment

Designation of the person interviewed

Executive Director FPASL

Director Advocacy and HIV prevention –FPASL

Director/NSACP

Consultant Community Physician/NSACP in charge of the Multi sectoral unit NSACP

Consultant Venereologist –STD Clinic – Wathupitiwala

MO/STDs - Wathupitiwala and Senior Register in Venereology

Consultant Community Physician/NSACP - in charge of prevention activities in North and East

Commissioner General of Prison - Rehabilitation and Chief Welfare Officer

Coordinator of Army sector - Consultant Community Physician

Coordinator- Police sector and Police media spokesman

Coordinator- youth sector and two trained youth council officers

Coordinator of Sri Lanka Air Force sector - Consultant Community Physician

Coordinator of the Business Coalition

President / Positive women Network

Coordinator of Sri Lanka Navy

National programme officer ILO

Director Training and two training officers Sri Lanka Foreign Employment Bureau

Head Health and Physical Education, National Institute of Education

Chairperson, Equal Grounds

Research Officer National Dangerous Drugs Control Board

Annex III- Data collection tool used in the thematic area Diagnosis, Care and Treatment services

HIV testing facilities				
Access to HTC services				
Modes of transmission and age groups				
Common Opportunistic infections prevalence and co-infections, HBV,HCV				
Non AIDS complications like diabetes, cardiac diseases, malignancy, etc (NCDs)				
Tuberculosis-Pulmonary/Extra pulmonary types of treatment				
CD4 range of tested patients if available- < 350, 350-500, >500				
Available ARV medications in the National programme ,Stock outs				
Common adverse effects to ARVs				
Toxicity monitoring tests available- (Hb%, LFT, S. Creatinine, Lactate, Lipase, etc)				
CD4 test, viral load				
Frequency of lab monitoring				
Linkage between HTC and ART centre				
Availability of inpatient facilities				
ARV regimen used for PMTCT				
Type of delivery- Vaginal/C-Section				
Infant feeding practice- Breast feeding/ formula feed				
Availability of Speciality care- Surgical, Neuro, Nephro, Cardiac, etc				
IPT, Cotrim				
Services for key population				

Annex IV - Persons interviewed in the thematic area supportive environment

Dr. Mahinda Samaranayake Director, North Colombo Teaching Hospital, Ragama

Dr . Ariyasena Hittherage Consultant Physician, North Colombo Teaching Hospital, Ragama

Dr Jude Wijesekara Consultant Surgeon, North Colombo Teaching Hospital, Ragama

Annex V- Places visited and persons interviewed in the thematic area health systems strengthening

Site visits

Infection Disease Hospital
Kandy STD clinic
Medical Supplies Division
Positive women net work –NGO office and shelter for HOV positives
Family Planning association
CSDF (Community Strength Development Foundation)-NGO office
Heart 2 Heart in Colombo (NGO MSM office)
Saviya Foundation, Galle (NGO)
Female Sex Worker hotspots in Colpetty sea side slum areas
Drug User hot spots in Galle
Beach Boys hotspots in Galle

In-depth interviews and group interviews conducted

NSACP Director and all consultants in charge of Training, laboratory, surveillance etc
Dr Ananda Jayawickrama Consultant Physician IDH and staff at HIV ward
Dr Jagath Ranawaka Kandy Venerologist and staff at Kandy STD clinic
Dr Jayasingha MSD Director
Dr Palitha Bandara Provincial Director North Central Province
Dr Kapila Kannangara Provincial Director Sabaragamuwa Province
Dr P Adhikari Regional Director Monaragala District
Executive Director FPASL and team managing GFATM funding
Ms Nanditha Katugampola-Population Services Lanka
Princey Mangalika -President/Positive women Network
Ms Kusum Jayalath-President/Abimani
Mr Jude Fernando- Chairperson/Heart to heart