# TOWARDS ENDING AIDS IN SRI LANKA

## A ROAD MAP

THE SRI LANKA MEDICAL ASSOCIATION & THE NATIONAL STD/AIDS CONTROL PROGRAMME







TOWARDS

### **ENDING AIDS**

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#### PREFACE

It is with sense of accomplishment that I write this brief preface to "Towards Ending AIDS in Sri Lanka: a Road Map". The Sri Lanka Medical Association undertook the task of developing a road map towards ending AIDS in Sri Lanka along with the National STD/AIDS Control Programme (NSACP) of the Ministry of Health.

Although Sri Lanka has maintained a low-level HIV epidemic since 1987 when the first Sri Lankan with the infection was detected, the reported numbers of new infections continue to rise. In 2015, a total of 235 new infections were reported to the NSACP which was the highest number reported in a year. Of this, 23% were diagnosed in the AIDS stage of the disease.

Sri Lanka will therefore, be required to mount an accelerated response over the next five years to end the AIDS epidemic. It is our belief that it can be achieved through renewed commitment by all stakeholders, including political commitment at the highest levels, increased resources, and technical and programmatic innovations. It is also imperative that the response be sustained through to 2025 and beyond.

The road map towards ending AIDS by 2025 consists of strategic directions to be followed if we are to achieve the 90-90-90 target set by UNAIDS, namely, that 90% of all people living with HIV know their HIV status, 90% of people with diagnosed HIV infection receive sustainable antiretroviral therapy and 90% of all people receiving antiretroviral therapy achieve viral suppression. These new targets aim to fast-track the national response in the next five years to end AIDS by 2025. These targets are included in the Political Declaration of 2016 where the global community adopted the Sustainable Development Goals (SDGs). The elimination of AIDS and other major infectious diseases by 2030 is a component of Goal 3 of the SDGs.

The 2016 theme for the Sri Lanka Medical Association is 'Moving from Millennium Development Goals to Sustainable Development Goals'. Therefore, the Sri Lanka Medical Association is proud to have undertaken this task in keeping with the theme for 2016.

#### **Iyanthi Abeyewickreme** President Sri Lanka Medical Association

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#### ACRONYMS AND GLOSSARY OF TERMS

AIDS	Acquired Immuno-deficiency Syndrome
ANC	Ante Natal Clinic
ART	Anti-retroviral Treatment
ARV	Anti-retrovirals
BB	Beach Boys
DU	Drug Users
EMTCT	Elimination of Mother to Child Transmission
EQA	External Quality Assurance
FHB	Family health Bureau
FSW	Female Sex Workers
GFATM	Global Fund for fighting against AIDS, Tuberculosis and Malaria
HIV	Human Immuno-deficiency Virus
HSS	HIV Sentinel Surveillance
IBBS	Integrated Bio-Behavioural Survey
IDU	Injecting Drug Users
KP	Key Populations
LIMS	Laboratory Information Management System
MARP	Most At Risk Population
M&E	Monitoring and Evaluation
MLT	Medical Lab Technicians
MSM	Men who have Sex with Men
MTCT	Mother to Child Transmission
NAC	National AIDS Committee
NSACP	National STD/AIDS Control Programme
PAC	Provincial AIDS Committee
PICT	Provider Initiated Counselling and Testing
PIT	Provider Initiated Testing
PLHIV	People Living with HIV
PR	Principal Recipient
PSE	Population Size Estimation
PWID	People Who Inject Drugs
PWUD	People Who Use Drugs
SIM	Strategic Information Management
STD	Sexually Transmitted Diseases
STI	Sexually Transmitted Infections
ТВ	Tuberculosis
UNAIDS	Joint UN Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization

#### **HIV/AIDS EPIDEMIC IN SRI LANKA**

The first Sri Lankan suffering from HIV infection was detected in 1987. Systematic screening for HIV infection among high risk behavior groups and potential subgroups such as female sex workers and STD clinic attendees believed to be at a higher risk of infection was initiated as far back as 1987.

In the year 2015 estimated adult HIV prevalence is 0.02% while the HIV prevalence among most at risk populations FSW (0.8%), MSM (0.9%) remains below. The country is currently experiencing a low level HIV epidemic. It is estimated that 4200 People living with HIV are in Sri Lanka and around 550 new infections occur annually.

#### HIV case reporting data

HIV case reporting is one of the main sources of data available in the country and is used to describe/understand the epidemic although it is not a robust method of knowing the HIV situation.

By end 2015, a total of 2309 HIV positive Sri Lankans was reported to the National STD/AIDS Control Programme. The reported cumulative number of AIDS deaths was 367and the occurrences of mother to child transmissions were 78. In addition, a cumulative number of 105 foreign nationals were reported with HIV by end December 2015.

During 2015, around one million (1,020,000) HIV screening tests were carried out throughout the country and of these 235 were confirmed as HIV positive, giving a sero-positivity rate of 0.03%.

#### Trends of HIV infection

To overcome possible reporting gaps in the early years of the epidemic, a detailed analysis of more recent HIV reported data for the last 7 -10 years was carried out to better understand the current epidemiological situation. It was observed that 54% of the HIV positives were reported during the period 2009-2015.

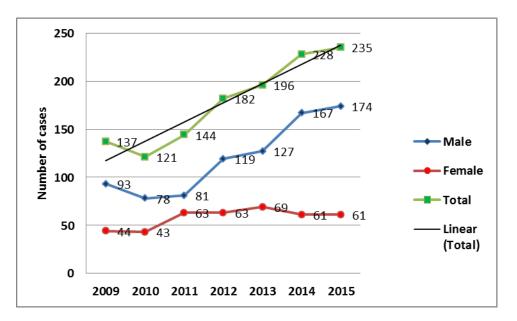


Fig1: HIV Trend among reported cases by sex 2009-2015

Reported data shows that there is a steady upward trend of HIV positives and it is noteworthy that during the past 10 years the number of cases reported annually has increased by 147%. This may have been due to an increase in new infections, improved testing facilities and better surveillance and reporting. The increase is more pronounced among males than in females notably from 2011. In 2015 the male to female ratio increased to 1.8 to 1.

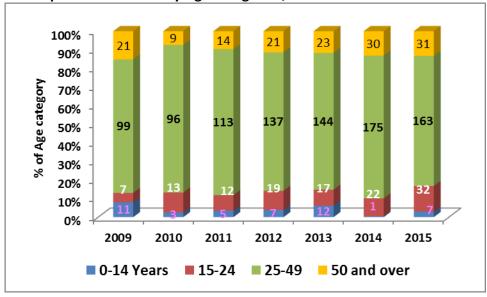
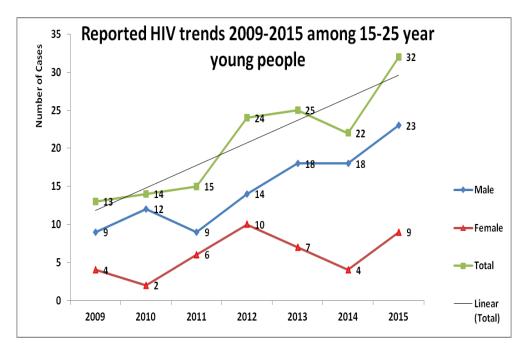
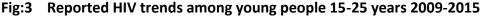


Figure 2: Reported HIV cases by Age categories, 2009-2015

Figure 2 shows the number and the percentage by age categories of reported HIV cases during the last five years. Consistently the majority of PLHIV have been in the 25-49 age categories. The age category 0 -14 represents mother to child transmitted cases. There were seven (3%) such cases reported in 2015. Another notable trend is the increasing number of cases in the 15-24 age categories.



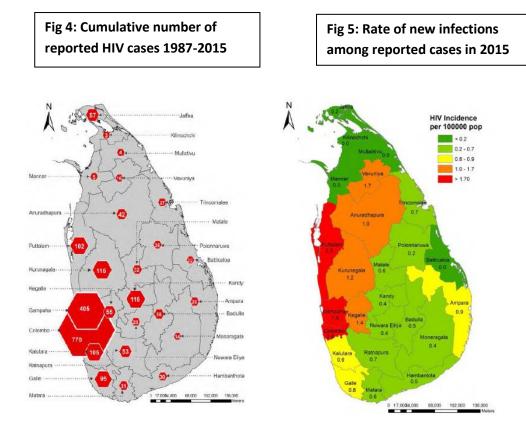


#### **New Infections**

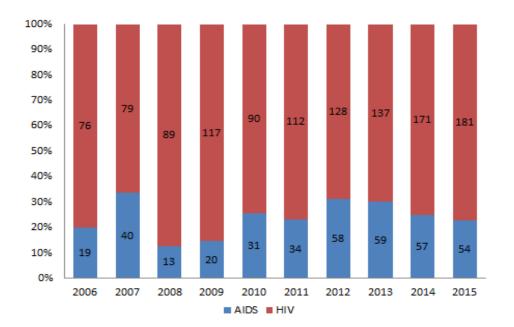
Where incidence testing is not available to measure new infections, HIV infection among young people 15-25 years have been used as a proxy measure for new infections (Fig 3). Over the years it has been shown that HIV infections among young people 15-25 years has been increasing, more among males than females. This fact implies that we need to implement more awareness programmes targeting youth, in and out of school, and educate them on life skills, to prevent new infections.

#### Geographical distribution of reported HIV cases

The maps given below show the geographical distribution of the reported HIV cases by district. While no district is free of HIV, Colombo, Gampaha, Kurunegala, Kandy, Kalutara and Puttalam districts have reported more cases.



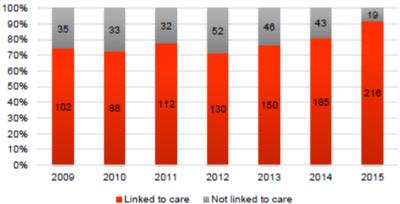
The highest incidence rates are reported from Colombo, Gampaha and Puttalam indicating that the focus needs to be on selected districts for achieving effective outcomes, especially in resource limited settings, however patient factors such as preferred choice of clinics due to stigma cannot be overruled and should be taken into account in service provision.



#### Stage of HIV diagnosis

Fig 6: Stage of the of disease at diagnosis of HIV among reported HIV cases 2009-2015

In the year 2015, among reported HIV positives, approximately 24% of the cases were found to be with advanced disease. This reflects failure to capture some of the potential risk populations early and missed opportunities for early HIV testing. Improved testing strategies that capture infected populations early is paramount for ending AIDS by 2025.



#### Linked to HIV care services

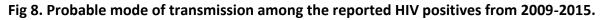
Fig 7: Number and Percentage of PLHIV linked to HIV care

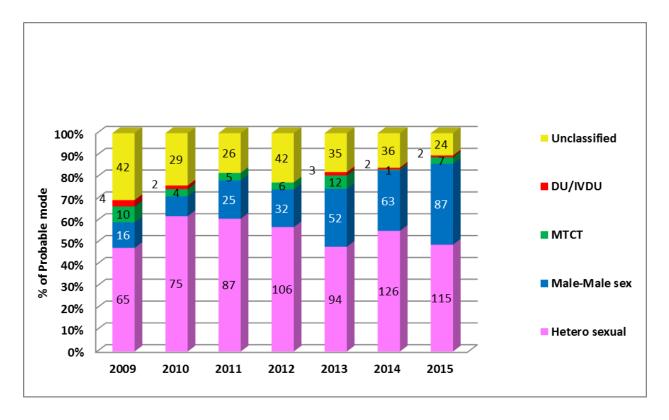
Ideally, all diagnosed cases should be linked to treatment and HIV care, not only to increase survival and improve quality of life, but also to reduce HIV transmission in the community by the provision of ART (treatment as a prevention strategy).To fast track to end AIDS in 2025, UNAIDS in 2015 had set '90-90-90' targets by 2020, which includes that 90% of those diagnosed with HIV should be linked to treatment and care services. Fig. 7 shows the number and the proportion of reported HIV cases that were linked to HIV care services within the reported year. Since 2012 the proportions linking to care shows an increase and in the year 2015 over 90% of reported HIV cases were linked to care during the year. This may be attributed to the stringent measures taken over the years to motivate all

diagnosed HIV positive cases to link to HIV services. Networking with private hospitals and laboratories and close follow up of the newly diagnosed PLHIV remarkably reduced the number of newly diagnosed cases lost to follow up.

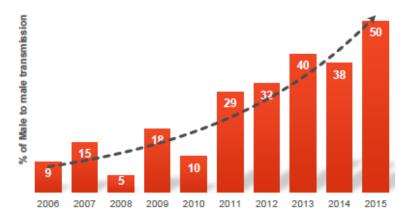
#### Mode of transmission of HIV

Analysis of the probable mode of transmission may give a clue to the HIV transmission dynamics.





It appears that the Sri Lankan HIV epidemic ismainly due to unprotected sexual behaviours. But evolving homosexual/bisexual transmission, amounting to 37% of the reported cases in 2015 cannot be overlooked (Fig. 9).





Trends in male to male transmission has shown a gradual increase over the past few years and in 2015, 50% of males with HIV gave a history of male to male sexual contact. Most of these men were married, with added implications on transmission of HIV to their female partners/wives and to their unborn children.

Intravenous drug use and sharing of needles/syringes leading to HIV transmission is very low. However, the data should be complemented by research and surveillance to identify patterns of switching to injecting drugs among drug users due to the presence of a large number of heroin addicts in the country.

#### MARPs in the HIV epidemic

To explain the dynamics of HIV transmission in low prevalent countries, statisticians and epidemiologists have proposed a unique model - the "Asian epidemic model". HIV is first introduced and concentrated among the populations with high risk behaviours namely female sex workers, men who have sex with men and injecting drug users, who in turn transmit the infection to their low risk female and male partners. The infected females then transfer the infection to their offspring.

The size of the population and the prevalence of risk behaviours and behavioral links among these populations (unprotected sex , number of partners and unsafe injecting practices) contributes to transmission dynamics.

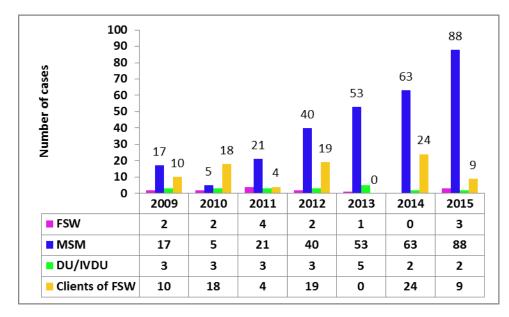


Fig 10: Proportion of MARP among the reported HIV – 2009 to 2015

Among reported HIV cases a very small number of FSWs and DUs were observed although the estimated numbers of female sex workers and drug users are 14,132 and 17,459 respectively. In 2015 the total number of HIV tests carried out among female sex workers was 1625 and three were identified as HIV positive. In the same year, of 2618 HIV tests among drug users only two were found to be HIV positive. The majority of reported cases were MSMs.

#### **Epidemic Focus**

Experts recommend (Mid-term Review 2015) that as Sri Lanka is still experiencing a low epidemic and the response must be focused on FSWs and MSM that have the greatest epidemic potential, while inhaling drug users who currently have a low epidemic potential need close attention to check for switching to injecting. However, programmes targeting MARP alone will not be sufficient to curb the HIV epidemic in Sri Lanka, and a communication strategy needs to be in place to raise HIV awareness among those who are not addressed through target interventions.

#### **PREVENTION OF HIV/AIDS**

Interventions targeting the general population with special reference to the most at risk populations (MARPs) and vulnerable groups from different settings are the main groups that are considered important in implementing preventive programmes for HIV/AIDS.

Elimination of mother to child transmission (EMTCT) is now considered a realistic goal with the use of antiretroviral therapy for infected mothers.

As for all preventive health activities, a well-established communication strategy is necessary for implementing an effective preventive programme against HIV/AIDS.

#### 2.1 Targeted intervention for Most at Risk Populations (MARPs)

In the path to end AIDS in Sri Lanka it is necessary to prevent the country moving from a low prevalence to a concentrated epidemic. The concentrated epidemic is possible only through female sex workers (FSW) and men who have sex with men. There are also beach boys and drug users (with around 1000 injecting drug users), who may not be able to cause a serious concentrated epidemic with major impact on the HIV epidemic in the country due to their small numbers.

According to the integrated biological and behavioural surveillance (IBBS) survey 2014, prevalence of HIV among MSMs is 0.9% and among FSWs is 0.8%.

For 'Ending AIDS', the country needs to bring down new infections further as guided by the identified targets.

Although the current targeted intervention programme is planned up-to end of 2018, Sri Lanka needs to continue with peer-led targeted interventions for most at risk population (MARP) groups beyond 2018 to achieve the objectives of Ending AIDS in Sri Lanka.

#### Gaps and challenges

- 1. Low quality and coverage of the existing peer-led targeted intervention programme.
- 2. Funding gap to continue peer-led targeted interventions beyond 2018.
- 3. To ensure resources for the programme.

#### **Expected Outcomes by 2025**

- HIV prevalence less than 1% among FSWs, MSM, PWUD/PWID and beach boys
- At least 80% of FSWs, MSM, PWUD/PWID and beach boys are reached by prevention services.
- At least 90% of FSW, MSM, PWUD/PWID and beach boys report consistent condom use
- Less than 5% of PWID report sharing of needles

#### Strategies:

- Behaviour change modification through outreach and peer education
- Community involvement in planning, implementation and monitoring and evaluation
- o Improve access to services including HIV testing services
- Strengthen STI prevention, diagnosis and treatment
- Promotion and distribution of condoms

#### 2.2 Prevention among vulnerable and general population

The National STD/AIDS Control Programme works with other sectors and provides technical support for advocacy, capacity building, awareness and internalization of STI and HIV prevention activities. NSACP maintains close collaboration with many sectors including the Ministry of Justice, the Prisons Department, the Police Department, Armed Forces, National Youth Services council, the Ministry of Fisheries, the Ministry of Education and Higher Education, the Ministry of Skills Development and Vocational Training, the Ministry of Labour, the Social Service Department, the Ministry of Mass Media, the Ministry of Women's Affairs, Sri Lanka Foreign Employment Bureau, the plantation sector and the Road Development Authority in relation to the HIV/AIDS prevention.

#### **Gaps and Challenges**

*Challenges for HIV prevention in vulnerable groups and the general population including youth* 

• Securing commitment for action has been a challenge in a low prevalence setting.

- There is a significant level of stigma associated with condom acceptability and usage, among different target groups.
- Misinterpretations of the law, which makes KPs reluctant to keep condoms with them.
- Restricted access to preventive services due lack of an enabling environment.
- Need of age appropriate sexual education in school system.

#### *Expected outcomes to achieve by 2025*

- HIV prevalence is less than 0.1% among vulnerable populations.
- All prisoners should receive at least one exposure to a HIV awareness programme and should have 80% HIV testing coverage.
- At least 80% of personnel in the armed forces and police are reached with HIV prevention programmes and have access for HIV testing
- All prospective external migrants are provided with skills based training in HIV prevention
- 90% of young women and men aged 15–24 both correctly identify ways of preventing the sexual transmission of HIV and who reject all major misconceptions about HIV transmission
- 90% of school children and young adults in educational institutes to be reached by age appropriate sexual education.

#### Strategies:

- Increase in awareness and behavior change communication programmes on HIV prevention for prisoners
- Strengthen skills based training on HIV prevention and ensure services for diagnosis, treatment and care for migrant workers
- Increase in awareness on HIV prevention among armed forces personnel and police
- o Provide HIV preventive services for persons in the hospitality sector
- Age appropriate sexual education in schools and higher education institutions.

- o Increase awareness on HIV among youth
- o Expand HIV prevention interventions in the workplace
- Promotion of condom use.
- Improve access to HIV testing and counseling services

#### 2.3 Elimination of Mother to Child Transmission (EMTCT)

The elimination of mother to child transmission of HIV is now considered a realistic public health goal. Timely administration of antiretroviral treatment to HIV positive pregnant mothers significantly reduces the risk of HIV transmission to the baby. In the absence of intervention the transmission rate is 25-45%.

In Sri Lanka, measures to prevent mother to child transmission of syphilis has continued since 1954 and prevention of MTCT of HIV programme has been initiated in early 2002 with the introduction of ART for PMTCT. Strategies and guidelines have been developed and regularly updated to introduce effective interventions to prevent MTCT of HIV. However, these services can be made available to women only if they are tested and identified as having HIV.

In Sri Lanka, by the end of 2012, paediatric cases constituted 3.5% of the total case load of HIV. Though Sri Lanka is a low prevalent country this trend warns about the importance of preventing mother to child transmission of HIV. Therefore scaling up the diagnostic services for preventing mother to child transmission of HIV is given priority by the National STD and AIDS Control Programme (NSACP) and the Family Health Bureau (FHB).

WHO recommends provider initiated testing and counseling (PITC) for HIV in pregnant mothers in low prevalent countries. Until the year 2012 the screening services to detect HIV among pregnant women in Sri Lanka was limited to a few centres with a coverage of 5.6%. In 2013 a policy decision was taken to introduce universal screening for HIV among pregnant women. The prevention MTCT of HIV programme was incorporated into the already existing elimination of congenital syphilis programme.

#### **Challenges and gaps:**

- Commitment of stakeholders to reach expected targets.
- Lack of human resources, laboratory services and logistics
- Issues in relation to data management

#### Expected outcomes by 2025

- o 95% of ANC attendees received HIV Testing and counseling services
- 100% of identified HIV-positive pregnant women received antiretroviral medicines to reduce the risk of mother-to-child transmission
- 100% of infants born to identified HIV-infected mothers received ARV drugs for prophylaxis
- >95% of ANC attendees tested for syphilis
- 100% Syphilis seropositive mothers receive effective treatment
- o 100% exposed infants receive effective treatment

#### The strategies proposed for EMTCT of HIV and syphilis;

- o Primary prevention of HIV transmission among women in childbearing age
- Prevention of unintended pregnancies among women living with HIV through enabling them to make informed choices
- Ensure and maintain a high level of commitment and advocacy to eliminate the incidence of congenital syphilis and paediatric HIV infection
- Increase access to and quality of syphilis and HIV services at maternal and child health services
- Prevention of HIV and syphilis transmission from women living with HIV/ syphilis to their children by promotion and linkage of PMTCT with related services
- o ARV prophylaxis and early infant diagnosis to manage HIV exposed infants
- Ensure the continuum of care for woman, partner and children infected and affected through appropriate care services
- Strengthen human resources to improve services through public health package
- o Strengthen surveillance, monitoring and evaluation systems

#### 2.4 Communication Strategy

Communication has to play a major role in achieving the objective of Ending AIDS by 2025, and it is the right time for the country to establish a communication strategy to achieve the set objectives.

Major communication activities are already implemented through the National STD/AIDS Control Programme and District STD clinics. NSACP conducts communication programmes on STIs/HIV/AIDS for STI attendees, antenatal clinic attendees and their partners, the armed forces and police, in prison settings, at special events such as World AIDS Day, at requestbased events as well as exhibitions.

Peer led targeted interventions were introduced in 2011 for female sex workers, men who have sex with men, beach boys and drug users and these programmes are planned to be continued till 2018. 'Communication on STIs/HIV/AIDS' is an important component of the sexual health service package provided to MARPs. The peer-led targeted intervention programme is currently planned up-to 2018, and needs to be continued to prevent the country from moving to a concentrated epidemic from its current low prevalence.

The majority of patients identified with HIV/AIDS are from the general population. It is obvious that there is a major gap in the communication programme on STIs/HIV/AIDS directed to the general population of the country. Therefore, there is a need to have a mass communication strategy to raise awareness among the general population on STIs/HIV/AIDS including a social marketing campaign on available services.

#### Major gaps and challenges

- o Lack of an effective public awareness campaign
- Underutilization of STI/HIV services
- o Stigma and discrimination towards key affected populations
- o Existence of punitive laws directed at certain population groups
- Resource need

#### **Expected Outcomes by 2025**

 Raised awareness among general population on STIs/HIV/AIDS and on the availability of STI/HIV services for them.

#### Strategies

- o Community involvement in planning and implementation
- Streamline central, provincial and district level communication activities
- o Behaviour change communication through outreach and peer education for MARPs
- Raising awareness on STIs/HIV/AIDS among the general population
- Social marketing of services for STIs and HIV/AIDS

#### SCALING UP HIV TESTING SERVICES

Ending the AIDS epidemic will require rapid acceleration of the response to HIV over the coming years. The essential steps required to be taken are acceleration of HIV testing, scaling up HIV treatment coverage, strengthen continuum of care for HIV infected people, elimination of mother-to-child transmission of HIV and strengthening HIV prevention activities. There are enormous opportunities to improve the progress made over the past 15 years and move forward to End the AIDS epidemic in the country.

One of the critical areas for fast action is ensuring all people living with HIV to know their HIV status. In achieving this goal the following steps need to be taken:

- diversify HIV testing by combining provider initiating testing (PIT) and community based testing,
- provide testing services to reach populations and settings where the HIV burden is greatest,
- ensure HIV testing services meet ethical and quality standards,

The strategic focusing of HIV testing services is critical in reaching those most at risk and diagnosing them early. HIV testing approaches need to have quality-assured testing technologies that could, identify and link greater numbers of people living with HIV to early treatment and care, maximizing HIV prevention potential and treatment effectiveness.

#### Gaps and challenges

- A significant proportion of people are diagnosed during advanced stages of HIV disease and in most cases, they have attended health care services several times, but were not considered for HIV testing.
- Though the HIV testing has increased numbers, testing among MARPs remains low.
- There are vulnerable population groups as well as hard to reach population groups due to socio-economic and geographical reasons who need to be provided with HIV testing services.
- Innovative approaches are needed to promote HIV testing services.

• There is a loss to follow-up from testing to care.

#### Targets to achieve by 2025

- 1. 95% of the people who are infected with HIV know their HIV status
- 2. 95% of the people diagnosed with HIV are linked to care and receive anti-retroviral treatment.

#### Strategies

- NSACP to review existing HIV testing policies and update guidelines for HIV testing services
- NSACP to train human resource and mobilize support to improve infrastructure to allow quality testing services
- NSACP to support and work with relevant sectors/agencies to increase demand for HIV testing services
- NSACP to promote provider initiated testing services in relevant clinical settings (adult and children), STI clinics, TB Clinics and antenatal settings.
- Promote outreach/community level HIV screening using Rapid HIV screening tests in the following situations:
  - Key Affected Populations (FSW,MSM,DU,BB)
  - Vulnerable population (prisoners, returned migrant workers, youth, tourist industry workers etc.)
  - People living in difficult geographical areas (estate sector, urban low socioeconomic settings)
  - People who find it difficult to attend services during working hours (three wheeler drivers, fishermen, long distance drivers etc.)
- Establish effective mechanism to strengthen linkage from testing to care.

#### STRENGTHENING LABORATORY SYSTEMS

To move towards the target of ending AIDS, a quality assured laboratory system becomes an essential component and forms a corner-stone of an HIV programme. Detection and monitoring of HIV infected patients should be in place in an optimized manner with uninterrupted service provision to achieve this target successfully. Therefore, it is necessary to establish a smooth quality assured work flow in the laboratory network which serves for HIV detection and management. A smooth work flow of a laboratory system depends on many factors. Provision of the key factors and sustaining them in the laboratory system should be given a high priority if we are to move towards ending AIDS.

There is an established and identified laboratory network at present with some deficiencies to fulfill the required targets. The root causes of the deficiencies are based on technical, managerial and financial constraints. Therefore, closing the gaps in relevant areas by strengthening the laboratories would assure elimination of AIDS in the country. Strengthening quality assurance together with moving towards laboratory accreditation should be given priority.

The laboratory scaling up should be a two prong development to achieve ending of AIDS. Developing the diagnostics and referral services should be in parallel with the development of research activities aimed at research questions surfacing in performing diagnostics. Fulfilling these targets will give a clear picture of the AIDS situation in the country which in turn will help reaching the ultimate goal of ending AIDS.

#### **Gaps and Challenges**

- In adequate infrastructure, equipment and human resources to provide quality assured services is a gap which needs immediate attention. HIV detection and monitoring services which should be strengthened with decentralization too is heavily affected by this. The challenge for fulfilling these is mainly administrative and financial.
  - No space provision by some of the central government institutes when the STD clinic is located there and administered by the provincial authority.
  - No human resources (specially MLTs) are supplied adequately by the provincial health authorities, ignoring the repeated requests made by the NSACP and the STD clinic officials.
- 2. The National reference laboratory is not an accredited lab though it has to provide services to the whole country including provision of EQA to the public and private sector.

The challenge is to move towards accreditation with

- A policy decision to accredit the laboratory
- To strengthen the lab with necessary staff ,equipment to work towards accreditation
- Introducing a laboratory information system

3. The gaps of service delivery at National reference laboratory with quick turnaround time, establishing mopping up services for other laboratories requiring services, handling high workloads and using new technology needs attention in ending AIDS. The challenge is mainly financial and some are led by poor managerial links among institutes. The challenges are

- Obtaining automated systems required to handle high work loads
- o Establishing molecular diagnostics
- Establishing services which need to be obtained on paid basis
- Establishing an uninterrupted service of supplies for diagnosis and monitoring of HIV
- 4. The gap of data management at laboratory level due to inefficient systems should immediately be addressed for ending AIDS. The heavy workloads are not matched at present with the computerized systems. The challenges are financial and technical. The prime challenge is
  - Establishing a LIMS (laboratory information management system) at National reference laboratory linked to the lab network for STD & AIDS
- 5. Laboratory based research on HIV is not well attended due to constrains of conducting research. The challenges are mainly financial and the factor of limited human resource. The challenges are
  - Establishing a culture for research
  - Obtaining adequate budgets and required human resource time for proper scientific research

#### Expected outcomes by 2025

• District level laboratories strengthened with adequate infrastructure, equipment and human resources to provide quality assured services

- National reference laboratory strengthened for efficient detection and monitoring of HIV infected patients
- HIV detection and monitoring services strengthened with decentralization
- New technology in place for detection of HIV in infants and monitoring of HIV.
- The national quality assurance system strengthened to ensure the quality assured service in public and private sector
- All service delivery units strengthened for managing laboratory information
- Enhanced research on HIV

#### Strategies and activities:

- Establish the laboratories in districts where no laboratory facilities are available and strengthen all the district laboratories with quality assurance.
- Appoint qualified technical staff and provide regular in-service training
- Provide infrastructure facilities.
- Provide the necessary equipment for testing and data management
- Enhance the service delivery at National reference laboratory with automation of systems to match the work load
- o provision of early infant diagnostic facilities
- establishment of an uninterrupted service of HIV monitoring including viral load and drug resistance testing
- enhancement of data management at laboratory level with provision of computerized systems
- improvement of infrastructure to match the molecular work and the rest of increased work load
- capacity building of the laboratory staff to improve services including the quality assurance in the district clinic laboratories
- Accreditation of the National reference laboratory

- Decentralizing the facilities for viral load and CD4 testing in few selected peripheral stations
- o Establish an uninterrupted supply chain for HIV detection and monitoring
- In scaling up of the services, supply is to be streamlined to have all the reagents from the Ministry of Health to avoid unnecessary delays and stock outs of the reagents received from multiple sources.
- Improving the screening of HIV utilizing the rapid test kits in the outreach programmes and quality assure the system with district level laboratory contribution.
- Improve research interests in the HIV.

#### ACHIEVE AND MAINTAIN QUALITY STI CARE SERVICES

Morbidity and mortality resulting from sexually transmitted infections (STIs) affect the quality of life, as well as sexual and reproductive health of adults and the health of newborns and children. In addition, the presence of STIs facilitates sexual transmission and acquisition of HIV. Cellular changes caused by some STIs lead to certain cancers.

Therefore, quality-assured sexually transmitted infection services are essential to overcome the adverse outcomes of STIs in individuals and communities. Attempts should be made to ensure equitable coverage of services to achieve maximum impact for all people in need, which includes both the general population and specific population groups that are most likely to have a high number of sex partners, such as sex workers and their clients, men who have sex with men, transgendered people, and people with an existing sexually transmitted infection, and people living with HIV.

Other groups such as young people and adolescents, women, mobile populations, estate populations, children and young people living on the street, prisoners, drug users and people affected by conflict and civil unrest who are considered to be vulnerable to sexually transmitted infections also need to be adequately covered through quality STI services .

Provision of quality STI services is rooted in a public health approach that focuses on preventing disease, promoting health and ensuring quality of life among the population as a whole. In order to achieve the above, Sri Lanka should provide a package of continuum of STI care which spans the full range of interventions that include prevention, diagnosis, treatment and care. Attempts should be made to ensure the widest possible access to high-quality services at the population level, based on simplified and standardized interventions and services that can readily scaled up.

Targets of this approach include all people reached by prevention activities, people tested, people aware of their status, people enrolled in care, people whose treatment has started, people whose treatment is complete, people who are cured, and people accessing chronic care.

The public health approach in the provision of quality STI care proposes the following:

- Standardized, simplified protocols and guidance;
- Integrated people-centered health services;

- Decentralized service delivery;
- A focus on equity;
- Community participation;
- The meaningful involvement of people most affected by sexually transmitted infections;
- Leveraging public and private sectors;
- Ensuring services are free or affordable;
- Moving from an individual clinical focus to population-based national plans.

It promotes the principle of Health in All Policies through, where necessary, legal, regulatory and policy reforms. It aims to strengthen integration and linkages between sexually transmitted infection services and other services, improving both impact and efficiency.

#### Gaps and challenges

There is a scarcity of resources (human, financial and material) for STI services at all levels in the country. Human resources as well as laboratory facilities and material base of STD clinics need improvement for improvement of STI services.

Raising awareness on sexually transmitted infections and promotion of sexual health needs to be an ongoing activity and also requires adequate integration into curricula at different levels of education.

#### Expected outcome by 2025

A concerted effort to rapidly scale up effective interventions and services can achieve the goal of ending sexually transmitted infection epidemics as public health concerns by 2030, by reaching the following set of targets:

- o 90% of the STD clinics to have facilities to provide comprehensive care for STIs
- 90% of the staff delivering STI care at government STD clinic to get the initial training within 6 months of reporting to duty
- 90% reduction of T. pallidum incidence
- 90% reduction in N. gonorrhoeae incidence

• Elimination of mother to child transmission of syphilis by 2017.

#### Strategies

- Strengthen sexually transmitted infection surveillance
- Tracking, monitoring and sharing evidence on the response
- Strengthen the governance and accountability NSACP relating to STI related services
- Ensure quality of care for sexually transmitted infection services and prevention interventions
- Target sexually transmitted infection interventions and services to populations and locations where need, risk and vulnerability are highest
- Ensure adequate allocation of domestic and external resources

Equip healthcare workers with skills and commodities to expand primary prevention, testing and treatment of STIs

Adopt increase acceptability and reduce costs of male and female condoms, and new marketing methods to boost their demand and use

#### SCALING UP OF HIV CARE SERVICES

Globally there were significant policy changes regarding HIV care services during the year 2015. UNAIDS came up with 90-90-90 targets, i.e. 90% of all people living with HIV will know their HIV status, 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy and 90% of all people receiving antiretroviral therapy will have viral suppression by the year 2020. WHO has recommended providing ART for all people living with HIV (PLHIV) regardless of their CD4 count. In line with these changes Sri Lanka needs to scale up services for comprehensive HIV care services. The decision to treat all PLHIV with ART was taken in February 2016.

By the end of 2015, a total of 948 PLHIV were under HIV care services and of them 803 were on ART. During 2015, a total of 235 persons were diagnosed with HIV. Of them 216 (92%) were registered in HIV care services during the same year. Thirty four deaths were reported in the same year among PLHIV due to AIDS.

#### **Expected Outcomes by 2025**

- 1. 95% of those estimated eligible are given ART
- 2. 95% of those on ART having viral suppression
- 3. 100% of HIV patients tested for TB and vice-versa by using PICT approach

#### Gaps and challenges -

- Poor linking to care services after diagnosis, adherence issues, defaulters and reluctance to disclose to partners are some of the patient factors which need to be improved through appropriate public health approaches.
- Stigma and discrimination issues still affect service delivery and need to be improved.
- Provision of specialist services in the peripheral STD clinics will increase accessibility to services.
- Further improving data management will help to evaluate the HIV care services programme.

#### Strategies:

- Provision of comprehensive care services including ART services to PLHIV to improve quality of life through specialist services in all nine provinces
- Address barriers to the commencement or continuation of antiretroviral medications to improve treatment effectiveness.
- Prevention and assessment of drug resistance
- Strengthen the mechanisms for collaboration between HIV and TB activities
- o Strengthen prophylaxis, diagnosis and treatment for co-infections and co-morbidities
- Scale up coverage, through the decentralization of HIV care services
- Scale up laboratory services to facilitate comprehensive services
- o Improve data management to monitor and evaluate the programme
- Increase awareness and implementation of good practices of health staff regarding issues related to PLHIV to reduce discrimination
- o Keeping people healthy and alive through person-centred and holistic care
- Strengthen the public health approach that is concerned with preventing disease, promoting health, and prolonging life among the population living with HIV

#### **HEALTH SYSTEMS STRENGTHENING**

Sri Lanka currently has a HIV programme which is integrated to a well-established health care system and has been recognized worldwide as an exemplary programme. The National STD/AIDS Control Programme could be further strengthened by incorporating and going hand in hand with the new developments across the globe in the field of HIV/AIDS to end AIDS in Sri Lanka by 2025. Currently activities are implemented according to identified strategies in the 'National Strategic Plan 2013 -2017' with few modifications done based on the recommendations of the midterm review and other reviews done recently with the assistance of international agencies such as GFATM, UNAIDS, WHO, UNICEF and UNFPA.

The five main strategic directions includes prevention of HIV, diagnosis, treatment and care of HIV, strategic information management (SIM), health system strengthening and supportive environment. Prevention of HIV encompasses prevention of transmission of HIV among key affected groups, vulnerable groups and general population including youth, elimination of mother to child transmission of HIV and congenital syphilis, prevention of HIV transmission through infected blood and maintaining quality and coverage of STI service.

At the national level, maximum effort has to be expended to develop all aspects of the five main strategies through the National AIDS Council and the Nnational AIDS Committee.

At present the peripheral STD clinic numbers are limited to one per district. But as can be observed a parallel health system is now developed up to base hospital level and a given district has several base hospitals. Most of the patients in the locality are drained to these base hospitals; by expanding STD/HIV clinics services along these base hospitals the accessibility of STD/HIV care for the people who require these services can be improved. As new HIV cases are reported from different parts of the country this expansion is a timely need for making ART services available at the base hospital level. To expand these services the infrastructure has to be strengthened and human resources increased. While increasing the number of clinics we need to maintain the quality of care delivered by these clinics.

#### Expected outcome by 2025

- To increase the accessibility to STD/HIV services to clients by increasing the coverage of services
- $\circ$   $\,$  To maintain the quality of care given by each service delivery point.

#### Strategies

This can be organized at different levels. During phase one the provincial level is addressed, while during phase two and three the district level and the divisional levels can be addressed respectively.

At each level:

- Identify the clinic at each level
- Approve appropriate cadre
- Develop infrastructure of the clinic with all the facilities to manage HIV patients.
- Coordinate with all stakeholders through provincial/ district/divisional AIDS committees.
- Ensure continuous monitoring and evaluation of the services provided and regular training of the staff.

#### Chapter 8

#### STRENGTHENING STRATEGIC INFORMATION MANAGEMENT SYSTEMS

Optimum management of HIV related strategic information plays a key role in moving towards the target of ending of AIDS by 2025. Strategic information in HIV includes monitoring and evaluation, HIV surveillance and research. Strategic information should guide the health policy, planning of programmes, resource allocation, programme management and service delivery. As Sri Lanka scale up the national HIV response, there is an increasing need to invest in strategic information management.

At present there is inadequate translation of strategic information for policy making and programme management purposes. This may be due to insufficient coverage of information, insufficient analysis, lack of proper dissemination, lack of clear conclusions, insufficient review of information and lack of knowledge and skill in using available information.

#### **Gaps and Challenges**

- Multiple stakeholders' own monitoring sub-systems need to be integrated into the national M&E system.
- The limited capacity to collect good quality data due to non-standardized definitions for data; duplication of data from multiple registers; and lack of appropriate tools needs to be improved.
- Difficulty in conducting surveys particularly in capturing hidden, stigmatized and mobile populations and difficulty in estimating these population sizes to inform programme planning and implementation are challenges.
- Data is often only used for seeking funding and for reporting requirements but not for programme improvement purposes. This lack of "data use culture" needs to be corrected.
- Sri Lankan government needs get the ownership and facilitate all strategic information management aspects of the ending AIDS campaign.

#### Expected outcomes by 2025

- 1. District level strategic information management units are established to generate and manage HIV related data at local levels.
- 2. Generate low cost strategic information on behavioural and biological data of key populations and general population at district level at regular intervals.
- 3. Establish a system to estimate size of key populations at district level
- 4. Strengthen all service delivery units for monitoring and evaluation of HIV related service provision.

5. Strengthen the national level strategic information management unit to enable to handle all HIV related information needs.

#### Strategies:

- Establish data management units at district level under the direction of provincial AIDS committees.
- Establish and maintain an electronic data management system for efficient information management.
- Regular size estimation and mapping exercises are conducted for key populations at national and district levels
- Regular behavioural and biological data are collected from key populations and information is disseminated to relevant policy and programme managers.
- Improve research in the field of HIV by capacity building of staff and allocation of resources.
- Ensure all key staff positions are in place and provision of regular in-service capacity building.
- Create a favourable M&E culture within the HIV programmes by regular sensitization programmes.
- Inclusion of all strategic information management related expenses in the ministry of health budget to internalize data management within the National programme.

#### SUPPORTIVE ENVIRONMENT

A supportive environment for the national response to the HIV epidemic is crucial to End AIDS in Sri Lanka. There are a number of supportive policies, laws, guidelines, strategies, plans and programmes in Sri Lanka which oversee the structure of the Sexual and Reproductive Health issues in the country in order to ensure the supportive and conducive environment for prevention of STIs and HIV. In addition, Sri Lanka is a signatory to several international conventions that uphold Sexual and Reproductive Health rights.

There are certain laws in the country which monitor specific behaviours of the most at risk population groups. Those laws cover sex work, same sex behaviours among males as well as the use of narcotics. The given laws have provision for taking legal actions. The Vagrants Ordinance, Brothels Ordinance and Section 365 / 365A of the penal code are among them. While enforcing authorities continue to take actions using the Vagrants Ordinance and Brothel Ordinance, hardly any reported actions based on Section 365 / 365a of Penal Code has been instituted. But with continuous training programmes for Police services personnel, a change of attitudes is evident and practices among them are moving in a positive direction. Whatever the origin of these laws, they operate within a wider scope. Therefore, the national response to the HIV epidemic should be able to overcome negative effects arising from these laws tactfully.

In the given context the National HIV/AIDS Policy, the National AIDS Committee (NAC) and the Provincial AIDS Committees (PAC) have to play a major role to establish a supportive environment for national response to the HIV epidemic in order achieve the objective of Ending AIDS in Sri Lanka.

#### Gaps and challenges

- Stigma and discrimination within and around healthcare services would be detrimental to the effort to End AIDS in Sri Lanka.
- Inadequate emphasis on the necessity for a rights based approach in fulfilling health needs of PLHIV.

#### Expected outcomes by 2025

o Zero deaths reported due to refusal of treatment

#### Strategies:

- Active overseeing of the national response by the National AIDS Committee (NAC)
- Establishment of Provincial AIDS Committees (PAC) and overseeing the implementation of treatment, care, control and prevention work in the relevant provinces
- Actions to uphold National HIV/AIDS Policy by NAC and PAC
- Implementation of National communication strategy with the objective of achieving supportive environment for national response to HIV epidemic in order to End AIDS in Sri Lanka.
- Addressing issues related to stigma and discrimination towards PLHIV and advocacy for a supportive environment through the routine communication network of the NSACP and its partners

#### THE WAY FORWARD......

Globally there is consensus that activities for HIV prevention and care services need to be accelerated to reach the targets of ending AIDS by 2030. This has become possible due to major scientific breakthroughs in approaches to HIV prevention and treatment. Early diagnosis and early initiation of antiretroviral treatment for PLHIV has markedly reduced AIDs related morbidity and mortality and extended the lifespan of PLHIV. Studies have clearly indicated that the risk of HIV transmission has been significantly reduced due to lowered viral loads in the community following early initiation of antiretroviral treatment for PLHIV. The number of options to be considered for HIV prevention has increased over the years further increasing opportunities for prevention. Elimination of mother to child transmission of HIV by 2020 is an achievable target for most countries including Sri Lanka.

All these developments lead the way to end AIDS as a public health threat to communities and countries.

#### 90-90-90 by 2020

The un-avoidable and essential milestone in achieving Ending AIDS would be achieving the 90-90-90 targets by 2020.

- 1. 90% of persons living with HIV will know their status
- 2. 90% of those identified with HIV infection will be on treatment
- 3. 90% of those on treatment will achieve virus suppression.

#### Ending AIDS by 2025

HIV infections may not disappear in the foreseeable future, but the AIDS epidemic can be ended as a global health threat. UNAIDS has set targets to end AIDS by 2030. Sri Lanka is confident that the goal can be reached by 2025.

To end AIDS by 2025 the number of new infections and AIDS related deaths will need to decline by 90% compared to that in 2010.

Sri Lanka, being a country with a low HIV prevalence and a satisfactory infrastructure in place for HIV prevention and care, has the capacity to reach the targets for ending AIDS by 2025. This document has identified the gaps and challenges in the current programme and recommended appropriate strategies to accelerate the national response to HIV to reach the targets for ending AIDS by 2025.

#### ANNEX

#### National Indicator framework for monitoring and evaluation for Ending AIDS in Sri Lanka

No.	Indicator level	Indicator	Numerator	Denominator	Format/ Source of data	Frequency of data collection
1	Impact	Percentage of key populations who are living with HIV (sex workers, MSM, beach boys, PWID)	Total no. positive	Total No. tested	HSS, IBBS	2-3 yearly
2	Impact	Number and percentage of PLHIV and on ART who are virologically suppressed	Number of people receiving ART who have suppressed viral load	Number of people on ART	ART register	ongoing
3	Outcome	Percentage of adults and children with HIV known to be on treatment 12, 24 and 60 months after initiation of antiretroviral therapy	Number alive and on treatment 12, 24 and 60 months after initiating ART	Total number of PLHIV who initiated ART 12, 24 and 60 months ago	ART cohort data	Ongoing
4	Outcome	Percentage of adults and children that initiated ART, with an undetectable	Number of PLHIV who initiated ART who have suppressed viral load at	Number of PLHIV with a viral load at 12 months conducted during the	ART register	Ongoing

#### Key indicators

		viral load at 12 months (<1000 copies/ml)	12 months after initiating ART	reporting period		
5	Output	Percentage of newly diagnosed adults linked to HIV care (individual linkage)	Number of adults newly enrolled in HIV care during the reporting period	Number of all adults newly reported during the reporting period	ART register, Case reporting	Ongoing
6	Output	Percentage of eligible adults and children currently receiving antiretroviral therapy among all adults and children living with HIV	Number receiving ART	Estimated number of PLHIV	ART register, Spectrum	Ongoing

7	Output	Percentage of people living with HIV that initiated ART with CD4 count of <200 cells/mm <sup>3</sup>	Number of HIV positive adults initiating ART within the past 12 months with a baseline CD4 count =<200 cell/mm3	Number of HIV positive adults initiating ART within the past 12 months	ART register	Ongoing
8	Output	Percentage of key populations reached with HIV prevention programmes with defined package of services (sex workers, MSM, Beach boys and PWID)	Number of key populations reached with HIV prevention programmes with defined package of services	Size estimate of key populations	PR2 PSE	Ongoing
9	Output	Percentage of Key populations who have received an HIV test in past 12 months and know results (sex workers, MSM, Beach boys and PWID)	Number of key populations who have been tested for HIV during the last 12 months and who know the results	Size estimate of key populations	STD clinic data, PR2 data and Spectrum	Ongoing