Presidential Address 2007

The control of sexually transmitted diseases, past, present and future prospects

G Weerasinghe¹

Our chief guest, Prof. Harsha Senevirathne, guest of honour, Dr. Veerakathy Harindra, past presidents, fellows of the College, members of the council, members of the College and distinguished invitees.

At this inaugural ceremony of the 12th Annual Academic Sessions of the College of Venereologists, I intend to discuss briefly the history of the control of sexually transmitted diseases in Sri Lanka, its present status and future prospects in the changing macro-environment of the National STD/AIDS Control Programme (NSACP). Since there are non-medical invitees as well as those in the medical profession in the audience, my address will be of a more generalized nature.

History

It was in 1952 that the Anti Venereal Disease Campaign was established in Sri Lanka. Since then the country has gone through 55 years of STD services. The term 'Venereal disease' has now been replaced with 'sexually transmitted infections' and even that does not adequately reflect the real scope of the specialty since venereology covers many conditions that may have not been transmitted exclusively through sex.

Establishing the Anti Venereal Disease Campaign in 1952 was the logical result of a variety of activities and developments that occurred prior to it. I would like to allude to some of the significant moments of the history prior to establishment of the campaign.

1. Adoption of legislative measures to control venereal diseases by targeting prostitutes in 1841, 1867 and 1889
2. Starting first free part time venereal disease clinics in 1921, 1931, and 1937 in Colombo, Kandy and Galle respectively
3. Additional services to control venereal diseases in 1938
4. Starting of training of medical officers to work in VD clinics in 1941
5. Opening of part time clinics totalling to 23 by 1944
6. Establishment of Venereal Diseases Control Project of WHO in 1951 under Dr S. M. Laired.

With the closure of the project the Anti-Venereal Diseases Campaign was established in 1952

Laboratory facilities were established in 1968.

In 1985, as a response to the then emerging global epidemic of HIV, the anti venereal diseases campaign was renamed the National STD/AIDS Control Programme.

I would now like to highlight some landmark events in the national response to the HIV epidemic in Sri Lanka.

1. Establishment of NSACP in 1985
2. Establishment of National Task Force for prevention and control of AIDS and the first HIV sero-survey in 1986
3. Detection of the first Sri-Lankan with HIV infection in 1987
4. Screening of donor blood for HIV antibodies in 1987 by the NSACP in collaboration with National Blood Transfusion Service
5. Formulation of Combined STD/AIDS control programme in 1988
6. Establishment of HIV sentinel surveillance in 1990
7. External review in 1993
8. Supply of free antiretroviral therapy (ART) in December 2004
9. First round of Behavioural Surveillance Survey conducted in 2006

The NSACP has been a fully devolved programme since 1987 with the introduction of the 13th amendment to the constitution. The central body of NSACP has its headquarters in Colombo along with the Central STD Clinic and National Reference laboratory. Presently, there are 29 fulltime STD clinics functioning throughout the country. Except Galle and Jaffna, all other clinics (26 clinics) are under the provincial administration. However, this administrative arrangement has not prevented us working as a technically coordinated programme.

Specialized STD services are available in Central, Colombo South – Kalubowila, Colombo North – Ragama and Kandy clinics.

¹Consultant Venereologist, North Colombo, Teaching Hospital, Ragama.

Facing the challenge of HIV

The NSACP is responsible for coordination of the national HIV/AIDS response, through planning, monitoring and coordination of all stakeholders. Since HIV and AIDS is not only a health problem, the control and prevention of HIV is not and will not be the responsibility of the NSACP alone in this country.

The availability of antiretroviral therapy (ART) (HAART / CART) free of charge since December 2004 is undoubtedly a major step in the battle against HIV in this country. At present ART is provided at the

1. HIV Clinic of the Central STD Clinic in Colombo
2. STD Clinic Kalubowila
3. STD Clinic Ragama
4. STD Clinic Kandy and at
5. the Infectious Diseases Hospital

There have been requests for ART to be provided in all districts and some appear to be oversimplifying ART management. These requests indicate a sheer lack of understanding of the gravity of the issue.

At this juncture it would be useful to address some major aspects that have to be considered before starting ART such as:

- preparation of patient for ART
- choosing the best regimen for the patient
- the necessity of regular monitoring once ART has commenced
- assuring adherence to the regimen – a life long process
- stopping or/and switching when indicated

Until end of September 2007, there were 400 HIV patients registered for medical care, and 102 patients started on ART, out of an estimated 500 with advanced HIV disease.

Considering the numbers and geographical distribution of known HIV patients and available expertise to manage ART, the NSACP is providing those services to the best of its ability. However there is no doubt that in few years to come the NSACP will be able to provide ART in all provinces when the newly qualified venereologists assume duties.

It is important to discuss briefly the way antiretroviral drugs work against the virus.

Once ART is started,

- the disease progression will cease in 3 to 4 months
- virus undetectability will be possible in 6 to 9 months
- immune status will be improved (with the increase of CD4 count)
- opportunistic infections will disappear gradually
- there will be less need for hospitalizations
- patients reach near normalcy
- the patient becomes less infectious and therefore less able to transmit the virus
- it will be possible to attract potential HIV positive persons to access health care

The clinicians have to decide when to start ART in consultation with the patient. This is not an arbitrary and imposing decision, but an evidence-based one. The overall clinical picture, the status of the immune system (which is assessed through the CD4 count) and viral load (that is the number of viral copies in 1 ml of blood) are the most important parameters used in making that decision. Once ART is started, the viral load probably is the most important parameter to monitor the status of the infection. If there is treatment failure, changes in the viral load would be the first parameter to reflect that situation. Therefore, in my view, uninterrupted facilities for viral load investigation is very important. Because of the low prevalence of HIV in the country, limiting the viral load testing to the National Reference laboratory would be adequate.

Sexually Transmitted Diseases Services STD attendance

	2004	2005	2006
Male	35836	30839	38422
Female	41773	42250	42927
Total	77609	73089	81349

The total number of visits recorded by STD clinics in 2004, 2005 and 2006 were 77609, 73089 and 81349 respectively. There have been 10,153 new episodes of sexually transmitted infections diagnosed in 2005 and 10,268 new episodes in 2006 throughout the country. We are aware that the patients seen in the STD clinics reflect only the tip of the iceberg. The annual estimates of new episodes of STIs are around 60,000 to 200,000. These figures are a clear indication of the extent of risky behaviours that people engage in.

On the other hand, the data on STI also indicate the vulnerability of Sri Lanka to an explosion of the HIV

epidemic. That is why the control and prevention of STDs is being regarded as a fundamental strategy for control and prevention of HIV all over the world. Very often, some look for reasons for low prevalence of HIV in this country. I want to answer that question by reminding them about the existence of well organized STD services under the dedicated leadership of an excellent team of professionals as one of the major reasons for the low prevalence of HIV epidemic in this country. There are of course other reasons such as a very low prevalence of injecting drug use and fairly high level of use of condoms among sex workers. Thus, the streamlining, strengthening and expanding STD services is the need of the hour mainly for two reasons, namely,

- it is fundamentally important to prevent an explosion of the HIV epidemic
- it is the logical sequence following the developments that are taking place in the specialty of venereology in this country

What then needs to be done?

I would like to look afresh at some common conditions that result in repeated attendance at STD clinics.

Common conditions leading to repeated attendance at STD clinics

- Non gonococcal urethritis (NGU)
- Genital herpes
- Pelvic inflammatory disease (PID)
- Vulvovaginal candidiasis (VVC)
- Bacterial vaginosis (BV)

Non Gonococcal Urethritis (NGU)

NGU is primarily a sexually acquired condition. It is due to inflammation of the urethra which is characterized by discharge and/or dysuria. Patient may be also be asymptomatic.

Causes of NGU

• chlamydia trachomatis	30-50%
• mycoplasma genitalium	10-20%
• ureaplasma urealyticum	10-20%
• trichomonas vaginalis	1-17%
• other bacteria (eg. bacterial vaginosis associated)	2-10%
• HSV, candida species, bacterial UTIs, urethral strictures, foreign bodies	<10%
• causative factor not identified	20-30%

The complications of NGU are, chronic NGU, epididymorchitis, and sexually acquired reactive arthritis

Chronic NGU could be either persistent or recurrent. There is no consensus of opinion in either diagnosis or management of persistent or recurrent NGU. What is important is that persistent or recurrent NGU can occur in 20-60% of men treated for acute NGU. I don't want to go any further on discussing NGU but would like to stress that management of NGU could be problematic sometimes.

Genital Herpes

Herpes is known to all of us and it is caused by HSV type 1 and 11. The infection usually causes multiple, superficial and painful lesions in the affected area. Following primary HSV infection, cell mediated immunity clears actively replicating virus from the body. But some virus remain lifelong in a virtually inactive state within neuronal tissues and may activate any time causing genital ulcers.

HSV recurrence

	Probability episodes	Average number of
Type 1	40-50%	1/year
Type 11	60-90%	4/year

Though it is not my intention to discuss HSV, we must not forget that HSV facilitates both transmission and acquisition of HIV and herpes in pregnancy may be associated with serious outcomes.

My concern is that recurrent genital herpes affects

- quality of life
- psychological functioning
- sexual functioning
- cognition and
- behaviour

and its management poses a challenge to the venereologist

Pelvic Inflammatory Disease (PID)

Pelvic inflammatory disease is the result of ascending infection from the endocervix causing endometritis, salpingitis, parametritis, oophoritis, tubo-ovarian abscess and pelvic peritonitis. Most episodes of PID are polymicrobial.

Symptoms and signs of PID

- intermenstrual bleeding
- post-coital bleeding
- recent onset menorrhagia
- vaginal discharge
- deep dyspareunia
- lower abdominal pain
- pain in right upper quadrant of abdomen

As there are no diagnostic clinical criteria for PID, a high degree of suspicion warrants treatment. If the condition is left untreated or treatment is delayed, recurrent attacks may result in serious complications and sequelae such as chronic pelvic pain, ectopic pregnancy, infertility and dyspareunia. These are associated with considerable psychological morbidity and are costly to treat in terms of time and money.

These sequelae are potentially preventable and we should work towards this objective.

Bacterial vaginosis

BV is the commonest cause of abnormal vaginal discharge in women of childbearing age.

It's characteristic signs are

- increased vaginal discharge which is thin, homogenous and adherent
- increase of vaginal pH above 4.5
- production of amines resulting in a fishy odour
- presence of 'clue' cells on the vaginal smear
BV is an important condition which has to be managed properly due to following reasons ;
- adverse pregnancy outcomes such as premature rupture of membrane, pre-term delivery and low birth weight
- non-pregnancy complications of BV such as it's association with PID, infertility and NGU,

BV is not a trivial condition. When recurrent episodes develop, extra care is needed to manage these patients.

Vulvovaginal Candidiasis (VVC) or thrush

Vulvovaginal candidiasis is most often caused by candida albicans. Nearly 75% of women will experience at least one episode in the life time and upto 5-10% of them will have more than one attack. Attacks of candidal infection may be precipitated by the use of antibiotics, diabetes mellitus, immunosuppression and pregnancy. But most of the time no cause can be found.

The frequent symptoms of VVC are vulval itching, vulval soreness vaginal discharge, superficial dyspareunia and sometimes external dysuria. Erythema, oedema, fissuring and satellite lesions are some of the signs of VVC.

Though easily diagnosed and treated **recurrent** VVC often constitutes a management problem, and considerably disabling for affected women.

Ladies and gentlemen, I have drawn your attention to common conditions causing recurrences that both inconvenience the patient and are costly for the service provider. I would like to propose that we set up special male and female problem clinics conducted by senior registrars and /or consultants in the specialty to deal with these patients. This is likely to renew confidence in treatment among patients, provide relief and reduce costs of care.

Dedicated clinic for sex-workers

When we think of people who seek STD services, sex workers naturally come to mind. Epidemiologically, sex workers are considered as the source and reservoir of STD/HIV /AIDS in all countries and considered as one of the groups most vulnerable to infection. Thousands of visits by sex workers have been recorded in STD clinics and this is probably the tip of the iceberg and the majority are unlikely to be benefiting by services that STD clinics can offer. We are familiar with the experience of Thailand, Brazil and Kampuchea that achieved 100% condom use among sex workers.

Female sex worker attendance

	2004	2005	2006
Newly registered sex workers for the year	890	692	597
Newly registered sex workers with STDs	502	457	358
Total number of visits recorded by sex workers	2117	2429	2117

The External Review of the national response to sexually transmitted infections and HIV/AIDS in Sri Lanka in 2006, identified strategic priorities for the National STD/AIDS Control Programme (NSACP). These included the need to map sex workers and develop an essential service package including clinical services for STIs and promotion of condom use. These have now being incorporated in the National Strategic Plan 2007 – 2011 and is expected to increase the accessibility of STD services for sex workers.

How are we to achieve the target set in the national strategic plan? One viable option would be to establish dedicated clinics for sex workers starting at the Central STD Clinic Colombo.

Emergency contraceptive services

As a provider of sexual health services, we also need to address the issue of contraception, including emergency contraception available at STD clinics.

Available data indicates that about 150,000 to 175,000 induced abortions take place annually in this country and about 10% of these are among unmarried women. Abortion is not legalized in Sri Lanka and may be performed only on medical concurrence to save the life of the mother.

Fidel Castro once said that one does not need to be an economist to understand the harmful effects of neo liberal policies of globalization that increase the gap between the haves and have-nots within a country and between countries. All what is needed is the ability to do simple arithmetic!

Neither I am an economist. But I too can do simple arithmetic and work out the enormous costs of induced abortions if one costs Rs. 3000/= ! But this cost escalates dramatically when complications occur and the loss of life that may take place cannot be costed.

Up to 10% abortion seekers are unmarried and they are unmarried females having unprotected sex. Even if we go by the lowest figures of all estimates the number of unmarried females seeking abortions a year is more than 15,000.

When we consider the possible health consequences, these women may be potentially vulnerable to STDs as well as HIV infection. We should be able to attract these women to our services by offering them emergency contraceptive services and same time STD care under one roof as in many other countries.

Sexual dysfunction

Another area that is important but rarely addressed is that of sexual dysfunctions. It is a matter of concern that these services are still not formalized within our state services.

Few men and women pass through life without experiencing some concerns and difficulties with their sexual life. Sri Lankans are no exceptions though culture is often a formidable barrier to surmount in seeking relief for these conditions. Sexual dysfunction may be the result of organic or psychological causes. The common problems experienced by men include erectile failure disorder, premature ejaculation and performance anxiety. Among women, primary vaginismus leading to nonconsummation deserves attention, other common complaints being dyspareunia and a lack of sexual desire.

Sexual dysfunctions – Attendance at Ragama STD clinic / 2006

Problem	No. patients
Erectile dysfunction	13
Premature ejaculation	09
Reduced libido	01
Total	23

I think you may agree with me that the confidential atmosphere in a STD clinic would be appropriate and comfortable for people with sexual dysfunctions to seek relief.

From the podium of 12th Annual Academic Sessions of College of Venereologists, I call upon the new generation of venereologists to take up this issue. They should lay special emphasis on this aspect during their overseas training such that they may provide care for this long neglected category. It is my firm view that services for sexual dysfunction should be and are an essential part of STD services.

In summary,

1. The HIV services available at present may be considered acceptable within our current constraints. But with more qualified venereologists being appointed to the provinces in the future, HIV services, in particular, availability of ART will expand. At present viral load investigation facility is available at the National Reference Laboratory in Colombo. But there is a dire need to ensure that this facility is continuously available to support decision making regarding time of commencing ART and also to monitor progress.
2. In keeping with the new requirements, challenges and the changes that are happening in the specialty of venereology in this country I propose the following new services within STD clinics
 - male and female problem clinics to tackle recurrences in NGU, genital herpes, PID, vulvovaginal candidiasis and BV.
 - dedicated clinics for sex workers
 - introduction of emergency contraceptive services
 - and sexual dysfunction services

In my view we will not be able to escape from the need to provide these services, which should start sooner than later, in the best interests of the control and prevention of STDs and HIV/AIDS in Sri Lanka.