Health care systems in transition III.          
Sri Lanka, Part II. 
The current status of HIV–AIDS in Sri Lanka
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**Introduction**

In South Asia, Sri Lanka is considered to be a country with a low prevalence of human immunodeficiency virus (HIV). However, most of the behaviours that facilitate the spread of HIV exist within the country. A large sexually active and potentially susceptible population aged between 15 and 49 years accounts for almost 55 per cent of the total Sri Lankan population of 18.7 million. The continuing conflict in the northeastern part of the country, in which an increasing number of military personnel is involved, together with many displaced people, has produced two vulnerable sub-populations. External economic migration among large numbers of unskilled and semi-skilled workers, especially women, progressive urbanization and the increasing pace of economic development and change could all potentially promote the spread of HIV in Sri Lanka. In addition, the close proximity to India, which is a high HIV prevalent country, leads to frequent travel between inhabitants of the two countries.

On the other hand, Sri Lanka is a small island whose population has a high literacy rate, a well-established health infrastructure and health indicators that are comparable with those observed in a developed country. The reason for the rapid spread of HIV in neighbouring countries and the response of their governments have been considered in the attempts to control and prevent further spread of HIV in Sri Lanka.

**Epidemiology**

The acquired immunodeficiency syndrome (AIDS) was first reported in Sri Lanka in a tourist in 1986 and in a Sri Lankan the following year. A cumulative total of 262 HIV infections have been reported up to 31 December 1998 and 93 people were diagnosed with AIDS (Table 1), of whom 67 had died at the time of writing. New infections, which have been reported annually since 1987, reached a peak in 1993, followed by a decline over the next few years, and peaked again in 1998. In the first 6 months of 1999, however, only 10 new cases have been reported.

Of the 237 HIV-infected persons with known age, 93 per cent were aged between 15 and 49 years, with the maximum number reported being in the age group 35–39 years. Of the 93 AIDS cases, 75 per cent were men, with the maximum number of cases reported in the age group 40–44 years. In the first 5 years of the epidemic (1987–1991), the male to female ratio was 4:1, which decreased to 2:1 in the second 5 years. By the end of 1998, women made up 47 per cent of reported HIV cases, demonstrating the gradual increase in the number of HIV-infected women reported during the last few years.

In 52 (20 per cent) of the 262 HIV positives, the mode of transmission was not known. Of the remainder, 83 per cent were heterosexuals, 15 per cent homo- or bisexual, 1 per cent of reported cases were infected through blood and 1 per cent through perinatal transmission. In Sri Lanka, transmission of HIV predominantly occurs via heterosexual exposure; transmission via injections has yet to be reported. It is estimated that of the 40 000 heroin users in Sri Lanka, only approximately 2 per cent are injecting users. Half the HIV-positive females detected in 1998 had been employed as domestic workers abroad. Most countries that employ these workers insist that they are subjected to compulsory testing.

Since 1993, HIV sentinel surveillance has been carried out following WHO guidelines. Six sites are in operation covering six of the eight provinces. Unlinked anonymous screening of commercial sex workers, patients with sexually transmitted diseases (STD) and patients with tuberculosis (TB) is carried out at these sites annually. Few cases have been picked up at these sites in the past 6 years, with an occasional positive case reported at some sites in 1993, 1995 and 1998. **Ad hoc** surveys among military and police recruits and remand prisoners using unlinked anonymous testing in 1998 again did not identify any new cases.
### Table 1  Reported HIV positives and AIDS cases, Sri Lanka, 1987–1998

<table>
<thead>
<tr>
<th>Year</th>
<th>HIV positive Male</th>
<th>HIV positive Female</th>
<th>AIDS Male</th>
<th>AIDS Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<td>1989</td>
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<td>1990</td>
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<td>1995</td>
<td>12</td>
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<td>9</td>
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<td>3</td>
<td>6</td>
</tr>
<tr>
<td>1998</td>
<td>29</td>
<td>26</td>
<td>55</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>166</td>
<td>96</td>
<td>262</td>
<td>70</td>
<td>23</td>
</tr>
</tbody>
</table>

It is estimated that around 60,000 new sexually transmitted infections are diagnosed annually, of which only about 10–15 per cent are seen in government STD clinics. Seventy per cent of male attendees of STD clinics admitted having had sex with commercial sex workers at least once.\(^1\) Significantly, 45 per cent of the sex workers studied had had multiple sexually transmitted infections. In 1997, 6948 persons attended government STD clinics, of whom 6636 were new patients. The commonest STD reported was genital herpes. Notification of new cases of syphilis increased from 2.2 per 100,000 in 1996 to 2.8 per 100,000 population in 1997. Gonorrhoea decreased from 4.0 per 100,000 in 1996 to 3.6 per 100,000. Of the new patients, 70 per cent were diagnosed as having one or more STD.\(^4\)

The annual number of new cases of TB detected has been around 6000–6500 during the past 10–12 years. The highest incidence rates are in the 45–74 year age group.\(^3\) Of the 3500 new TB patients tested for HIV during sentinel surveillance since 1993, only one patient has been found to be HIV positive. However, pulmonary tuberculosis was one of the commonest opportunistic infections diagnosed among AIDS patients.

On the basis of current data and projections, it is estimated that the number of Sri Lankan adults living with HIV–AIDS in 1999 is around 7500, with an estimated 250 HIV-infected children. Recently, a National Working Group has been formed to update estimates for HIV–AIDS and improve methods of surveillance.

**Sri Lanka’s response**

The reporting of HIV infection among female sex workers in Madras in 1985 alerted the Government of Sri Lanka (GOSL) to the danger of HIV–AIDS and the need to establish a control programme. This need was further reinforced when a tourist convicted of a narcotic offence claimed he was infected with HIV and sought repatriation. In 1986, the National AIDS Task Force was formed, which was later expanded to form the multidisciplinary, multisectoral National AIDS Committee (NAC). Important ministries such as Education, Labour, Social Services, Finance and National Planning, Youth Services and Information are represented, in addition to representation from the private sector and non-governmental organizations (NGOs). UN organizations and other international agencies are included as observers.

The NAC is currently chaired by the Secretary of Health and Indigenous Medicine and has five sub-committees that advise it on issues related to the care of HIV-infected people, blood safety, laboratory services and surveillance, legal and ethical issues, and information, education and communication strategies. There is also a sub-committee on NGOs. Through the NAC, other important ministries have been sensitized to prepare plans and carry out activities related to HIV in the workplace. In the provinces, the Provincial Director of Health Services is responsible for undertaking HIV–AIDS prevention activities with the assistance of the Provincial AIDS Committee.

HIV and AIDS prevention and control was integrated into the existing STD Control Programme in 1985. The National STD/AIDS Control Programme (NSACP) is a public health programme of the Ministry of Health and Indigenous Medicine (MOH&IM). The NSACP co-ordinates closely with the other relevant public health programmes of the MOH&IM, particularly the Health Education Bureau (HEB), Family Health Bureau, the Epidemiological Unit and the Respiratory Diseases Control Programme.

**Securing the blood supply**

Safeguarding the blood supply through screening of donated blood for HIV infection was one of the first preventive measures undertaken by the GOSL. This was instituted in 1987 by the NSACP in collaboration with the National Blood Transfusion Service (NBTS).

The ELISA test for detecting HIV antibodies was first used in the central laboratory of the NSACP. Since then, NSACP has continued to perform this important function for the central blood bank of the NBTS. The 56 regional blood banks distributed throughout the country screen donated blood on site. All blood and blood products issued by the NBTS are screened for HIV antibodies before issue. For the period 1987–1998 a total of 979,967 units of blood were screened, of which 17 were HIV positive, giving a sero-positivity rate of 2 per 100,000.

Of the two cases of transfusion-related HIV infections reported to the NSACP, one was due to blood transfusions received abroad and the other was probably due to a blood transfusion in Sri Lanka.

Although 70 per cent of the NBTS supplies come from voluntary blood donation, the possibility of blood from commercial donors entering the system has to be acknowledged.
NBTS in future aims to collect all the required blood through voluntary donations. It has also introduced a questionnaire cum declaration to be completed by those who want to donate blood. This serves as a voluntary method of prevention for those, who may be at risk of being infected with HIV, from donating blood.

Some private medical institutions in Sri Lanka, especially in Colombo, also offer their services as a blood bank to the public, but they are not regulated by the NBTS. A Private Medical Institutions Bill that incorporates legislative powers for the MOH&IM to regulate public and private sector blood banks has been drafted. Guidelines to ensure the safety of the blood supply have been finalized by the NBTS and will be circulated to all health institutions in the country.

Prevention through education and information

Given the fact that heterosexual transmission is the predominant mode of HIV transmission in Sri Lanka, modification of sexual behaviour through information, education and communication has been another major prevention strategy adopted by the MOH&IM. Information, education and communication activities to increase public awareness and knowledge commenced in the mid-1980s and continue to be implemented both through the government and NGOs. The HEB is at the centre, and its network of over 50 health education officers in the provinces are primarily responsible for implementing health promotion and health education activities. In addition to programmes aimed at the general public, the HEB, in collaboration with the National Institute of Education and the National Youth Services Council, has focused on youths at school and elsewhere. A variety of methods and approaches, including the mass media, lectures, discussions, debates, posters and leaflets, and poetry and drama, has been used to deliver the health messages. These programmes are continued with UNFPA, UNICEF and World Bank funds, and technical support is provided from the NSACP. The NSACP and the HEB are also responsible for the training of ‘trainers’ such as teachers, youth leaders, religious leaders, nurses, public health medical staff and NGOs.

Studies carried out on knowledge, attitude and behaviour in 1988 and 1992 showed a measurable improvement in general awareness of the risks of HIV. A population cum outlet survey to measure priority prevention indicators as outlined by WHO–GPA in 1994 for evaluation of HIV–AIDS programmes was carried out in 1997 in one urban and one rural district out of the 25 districts in Sri Lanka. Around 1800 randomly selected men and women, aged between 15 and 49 years, were interviewed in each district. Eighty-nine per cent in the rural and 86 per cent in the urban areas were aware that protection from HIV transmission could be obtained through the use of condoms.

Whereas the reported number of non-regular sexual partners in the rural and urban areas were 2.1 and 2.3, respectively, in the last 12 months, condoms were reportedly used only during 25 and 38 per cent of these high-risk encounters. The STD incidence in males was only 0.6 episodes in the last 12 months in the urban area compared with 3.1 episodes in the 12 months in the rural area.

Condoms are provided free of charge through STD clinics. The socio-cultural and religious barriers, such as the belief that condoms increase promiscuity and opposition from the clergy that exists against the promotion of condoms, necessitated the modification of the messages that could be transmitted via the mass media. However, taking into consideration the results of the prevention indicator survey and the predominantly heterosexual mode of HIV transmission, the NAC has acknowledged the need actively to promote condoms for disease prevention through a social marketing programme.

Provision of STD care

Since the inception of STD services in Sri Lanka in 1951, the programme has comprised a central clinic together with a network of provincial clinics, with minimal involvement of the primary health care (PHC) system. In keeping with WHO’s current policies, syndromic management of STD is being gradually introduced at PHC level, whereby patients are diagnosed and treated on the basis of symptoms and clinical signs, preceded by training of medical personnel.

A 5 year project for prevention and control of STD and AIDS, with substantial assistance from the International Development Agency and the World Bank, is currently under way, which includes infrastructure development, personnel, training, information, education and communication activities, together with supplies and equipment.

Management of patients with HIV infection

Initially, the Infectious Diseases Hospital (IDH) in Colombo, which had a consultant physician with experience in managing HIV-infected people, was identified as the national centre for management of patients and training of staff. With increasing numbers of AIDS patients, patients with HIV infection are now followed-up periodically at a number of sites to assess their health status and to offer counselling and support. Because of limited facilities, monitoring of CD4 counts is carried out only in Colombo. In keeping with government policy, all HIV-infected patients requiring institutional care are now admitted to general wards. However, domiciliary care is encouraged. The unit at IDH serves as a safety net for patients who are rejected by their families. Few NGOs assist the government in providing care for patients with HIV and AIDS.
The anti-retroviral drugs, zidovudine and lamivudine, have only recently been registered in Sri Lanka. A policy on anti-retroviral therapy has now been presented to the MOH&IM for approval. Once approved, all pregnant women with HIV infection, all those who acquire HIV infection in a healthcare setting, including healthcare workers who are accidentally exposed to HIV during the course of duty, and children less than 12 years of age will be offered treatment with anti-retroviral therapy free of charge. HIV-infected individuals from other groups have to pay themselves for anti-retroviral therapy, which is available on prescription.

Conclusions
Sri Lanka currently has a low prevalence of HIV infection. However, vulnerable populations and high-risk behaviours that could fuel a more rapid spread of HIV are also present and relatively common. Therefore, there is no room for complacency. Protection of the blood supply, long-term education programmes to ensure public awareness about HIV, especially among young people and other vulnerable groups, and early and comprehensive treatment for STD are critical elements of the HIV prevention programme, which should be further strengthened in Sri Lanka. Access to good quality condoms at affordable prices, voluntary confidential testing and counselling, prevention of mother-to-child transmission, and care and support for people infected with HIV are equally important measures that require continuing attention.

References

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