Status of Leprosy - Sri Lankan Experience

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Introduction

Sri Lanka is an island with a land area of 65,654 square kilometers. It is situated in the Indian Ocean, on 5° to 9° northern latitudes and between 79° and 81° eastern longitudes. Sri Lanka has a mountainous region in the center of the country with peaks as high as 2,524 meters, and is surrounded by a plain. The mean temperature ranges from 26°C to 28°C in the low country and from 14°C to 24°C in the hill country.

The mid-year population of Sri Lanka is around 18 million in 1999 and the growth rate is 1.3 per cent. For purposes of administration, Sri Lanka is divided into 8 provinces, 25 districts, and 305 divisional Secretory areas. The capital city of Sri Lanka is Colombo and it is situated in the western province. At present Sri Lanka has approximately 288 persons per square kilometer.

As far as leprosy is concerned, Sri Lanka has reached the prevalence rate of Leprosy, less than 1 patient per 10,000 population at the national level. However, there are endemic districts in the country with higher prevalence rates (Example: 3.8 in the district of Colombo). Hence, the country has reached the most difficult phase to achieve the elimination target uniformly in all the districts - sub national level.

History of Leprosy in Sri Lanka

Evidence of leprosy like disease in Sri Lanka dates back to 200 BC. During Dutch regime in 1657, the first leprosy hospital was built in Hendala, in the western province. In 1903, the promulgation of Leprosy Ordinance was enforced by the British rulers, making admission of leprosy patients to the leprosy hospital compulsory. In 1921, the second leprosy hospital was built in Mantivu, in the eastern province.

The Leprosy Ordinance was repealed in 1993. Hence, admission of patients to leprosy hospitals has completely stopped.

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Currently, the inmates of the leprosy hospitals are on average 70 years old. With the decline of the number of inmates, the two hospitals may be closed in the future.

In 1954, The Anti Leprosy Campaign was established. Since then monitoring, implementation and evaluation of leprosy control activities have been performed by this vertical campaign under the Ministry of Health.

**Leprosy Control Programme in Sri Lanka**

Sri Lanka has always kept abreast with the leprosy control activities of the developed countries. The first and the most effective short-term chemotherapy, Multi Drug Therapy (MDT) recommended by World Health Organization (WHO) was introduced in the same year as in other countries. Sri Lanka is one of the first countries to achieve 100 per cent coverage of all registered cases with MDT.

In order to generate and meet demand for leprosy services, Sri Lanka adopted the social marketing approach.

In 1990, an island wide Social Marketing Campaign was launched. This led to the detection and cure of over 19,000 patients and contributed to the elimination of leprosy as a public health problem in Sri Lanka since 1996.

**Leprosy Control Activities**

Case detection, regular treatment, health education, training of medical and para-medical personnel and providing field based services to the patients with deformities are the major activities carried out by the Anti Leprosy Campaign.

High priority is given to deformity care, as the elimination level is reached at the national level. In addition to field based services provided to the patients with early deformities, constructive surgeries are performed when it is indicated.

**Current Status of Leprosy**

During the past years, both prevalence and incidence have shown a decline. Although the prevalence has reached elimination level at the national level, still in some districts the same is higher than the national rate.

The prevalence and the detection rate for the past decade are shown in figures 1 and 2, respectively.

The basic indicators used to assess leprosy control programmes; namely the child rate, multi bacillary rate and mode of detection among new leprosy cases are shown below, for the past years.
The percentage of children under 15 years of age among new cases is an important indicator, which reflects the transmission of the disease.

Figure 3 shows the child rate (under 15 years) during 1989 - 1998. The child rate was declining gradually till 1997. However, it increased in 1998. This may be due to increased number of school medical inspections conducted.

Before the Social Marketing Campaign was launched in 1990, self-reporting was around 9 per cent. But, this has changed markedly and now self-reporting accounts for about 35 percent of the new cases. Figure 5 shows the mode of detection for new cases during 1989 - 1998.

The child rate was declining gradually till 1997. However, it increased in 1998. This may be due to increased number of school medical inspections conducted.

The percentage of multibacillary (MB) patients i.e. infectious type, among new cases is shown in figure 4.

It is observed that MB rate is gradually increased over the past years. This could be due to increased surveillance and mass media awareness conducted, giving prominence to MB signs.

Research Activities

After implementing the Social Marketing Campaign, a study on "Illness, Experience and Socio-cultural Meanings of Leprosy in Sri Lanka" was carried out in 1997. The study surveyed 1800 non-affected persons including School Teachers, Midwives and 430 Health Care Providers- both allopathic and ayurvedic. This study was carried out with the objective of assessing the residual impact of the Social Marketing Campaign on Knowledge, Socio-cultural Attitudes and Practices. Based on the final findings of this study, a five-year plan for elimination of leprosy in Sri Lanka was formulated.

Conclusions

Leprosy which was a major public health problem in Sri Lanka has reached elimination at the national level already by 1996. Despite this significant progress, a number of challenges remain and concrete measures must be taken to reach the elimination target uniformly throughout the country.
Key challenges facing Leprosy Control Programme of Sri Lanka are:
1. Leprosy has not been eliminated from western and eastern provinces. (Even though the western province has the largest concentration of Health Care Providers in the country.)
2. There are endemic pockets in some other districts as well.
3. Leprosy patients are still misdiagnosed by the Health Care Providers and about 11% of patients visit Leprosy clinics with developed deformities.
4. Although the social stigma of leprosy has been reduced dramatically over the past decade, it still lingers on partly.

Sri Lanka is focusing its attention on addressing these key issues effectively in order to improve patients' access to diagnosis and treatment, and thereby ensure timely cure and finally the interruption of the transmission.

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