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Report on Sri Lankan Community Health Services

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Introduction

Sri Lanka, which is officially known as the Democratic Socialist Republic of Sri Lanka, is an island country in South Asia and is located about 31 kilometres off the southern coast of India. Despite a modest GNP of \$856 per capita in 2000, the 19.3 million inhabitants enjoy comparably high social and health standards. Life expectancy at birth is 73 years, which is considerably higher than the global average (1).

In 2007, I got the opportunity to gain field experience in Sri Lanka's community health service, in particular in its oral health program. Therefore, I would like to report the current status of community level health services in Sri Lanka. This project was conducted under an agreement between Niigata University and the University of Peradeniya.

Health service

Sri Lanka has one of the most effective health systems of any developing nation as its government-sponsored health services are free and are delivered through health centres, hospitals, and located dispensaries from the primary to the tertiary level and are thus able to reach the majority of the community (2). According to the Ministry of Health (2002), on average, the public have free access to a health-care centre within 4.8 km of their home. The government provides health care for nearly 60% of the population,

encompassing the entire range of preventive, curative, and rehabilitative health-care provision (3). However, the inhabitants of some areas do not have easy access to hospitals because of regional and geographical disparities. For example, Nuwara Eliya, which is famous for its tea plantation, is located at an altitude of 1,868 meters in the Central Highlands.

Maternal and Child Health

In the past few decades, Sri Lanka's maternal mortality ratio has declined significantly. According to the Ministry of Health in Sri Lanka, the Maternal Mortality Ratio was 57 per 100,000 live births, and the Infant Mortality Rate was 16.3 per 1,000 live births in 2000 (3). Therefore, the health service for maternal and child health has been performing as well as those in other South-East Asian countries.

The health service in Sri Lanka covers 4 main areas, maternal mother care, new born child care, infant care, and family planning. Mainly, these services are conducted at Material and Child Health (MCH) clinics. MCH clinics act as health centres or obstetric clinics. Doctors and midwives monitor the health status of pregnant women and infants, and they also provide education about nutrition and infections for mothers and infants.

Each midwife works on family health activities for a local population of approximately 3,000-4,000 (4).

When I visited one of the MCH clinics, I saw many pregnant women and infants waiting in a long line to receive a medical check-up. MCH clinics consist of an obstetrician, midwives, and nurses and have a responsibility to provide both patient care services and community health services. This system is implicated in the recent reductions in the mortality rates of pregnant women and infants.

However, the lack of midwives is still a problem. The WHO Statistical Information System reported that the nursing and midwifery personnel density in Sri Lanka was 17.0 per 10,000 population in 2004 (5). Therefore, it is suggested that the small number of medical staff means that it is difficult cover all mothers and infants, especially in rural or conflict affected areas.

Dental Health Service

1. School Dental Service

Dental health services are provided through the medical infrastructure by Dental Surgeons (Dentists) and Dental Therapists, and school-children (3-13 years-old) can receive dental health service at School Dental Clinics. These clinics are managed by School Dental Therapists, who provide basic preventive care, oral hygiene instructions, oral examinations, fillings, and extraction of all deciduous teeth.

District and rural hospitals provide special dental care services for the difficult cases that are referred by the School Dental Clinics.

During 2000, there were 280 School Dental Clinics, and 461 School Dental Therapists provided dental health services (6). School Dental Clinics mainly belong to primary schools. The School Dental Clinic in Pilimatalawa I visited several schools and provided dental health services for the pupils.

In other cases, the Division of Community Dentistry from the Faculty of Dental Sciences of the University of Peradeniya have also provided dental care and oral hygiene education for schoolchildren in underserved areas in Kandy since 2000. This service is performed once a month and covers 9 schools a year at present. When I witnessed their work, the team was composed of two dentists from the Division of

Community Dentistry and 7 undergraduate dental students, who visited the primary schools in Kandy. These dental students were supervised by the dentists while they carried out examinations and treatment under an artificial lamp in the library room. They perform such services outside of the school if artificial light is not available.

Children aged 5-7 years-old (Grade 1 and 2) were examined by the dental students to assess their caries status. Dental treatment and oral hygiene instructions were also given.

Atraumatic Restorative Treatment (ART) was provided to 34 children on this visit. The ART approach includes both prevention and treatment of dental caries. The ART procedure is based on excavating and removing caries using hand instruments only and then restoring the cavity with glass-ionomer cement. According to the instructor of this project, the ART approach is beneficial and practical for school-based oral health services. Furthermore, the survival rate of restorations was relatively high. Several studies have reported that the survival rate of the restorations in the school children was 66% after two years (7) and 64.8% after six years (8). Therefore, ART is effective in school-based intervention programmes, although it is necessary to follow-up after several years.



ART given by a dental school student



Oral health education focused on modifying risk behaviours related to the use of tobacco

2. Dental Health Camps in privileged areas in Nuwara Eliya and Matale

Medical services are provided free of charge by the Sri Lankan Government; however, for people living in remote villages it is difficult to access the dentist on a regular basis. The University of Peradeniya has conducted several medical and dental camps to offer treatment for optical, lung, and other problems several times a month, supported by the Lion Corporation, a Sri Lankan and Japanese nongovernmental organization (NGO).

The village I visited first was moderate-sized and located in a mountain area between Rammborra and Nuwara Eliya. Most of the villagers were workers in a tea plantation. Our dental camp was composed of 6 dentists and NGO volunteers. The number of patients was 133. First, all patients gathered at the school to be diagnosed by the dentists. Some patients received restorative treatment while others were offered extractions based on their diagnosis. Meanwhile, the dentists also gave oral hygiene instructions to the patients individually and provided them with toothbrushes.

Most of the villagers shared toothbrushes with their family and woman aged 40 years completely lost her tooth because of a lack of knowledge about oral health behaviour such as tooth brushing and the unavailability of toothbrush products.

The dental camp in Nuwara Eliya



Tea plantation



The reception of the dental camp

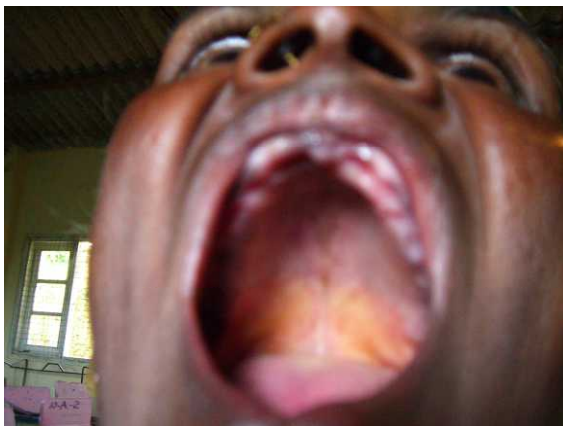


The Japanese and Sri Lankan NGO



Dental examinations

Dental treatment (excavating caries)



Complete loss of all natural teeth
(Woman aged 40 years
-old)

Oral hygiene instruction using a
gnathostatic model

Another village I visited was in poverty-stricken area of Matale. This was the first visit to this area by a dental camp. Although many people in the village were not informed of the dental camp, 98 patients came to be examined and received treatment. Because this village is located in an area that has a higher fluoride concentration in its drinking water, information about the dangers of smoking and betel chewing with regard to oral cancer, and tooth brushing instructions with appropriate quantities of fluoride toothpaste were provided using a projector.

Compared with the village in Nuwara Eliya, few cases of caries that needed extraction were found.

The dental camp provided oral hygiene instructions that were specific to the patients' oral disease burden and lifestyle.

The dental camp in Matale



Oral hygiene instructions provided using a projector by a senior dentist from the University of Peradeniya

Conclusions

In terms of development and health, Sri Lanka is better off than most countries in South-East Asia (9). The government of Sri Lanka has focused on “Primary Health

Care”, and the policy has led to increases in life expectancy (3, 6). In addition, domestic and international NGO provide health services, and their activities are relatively effective at delivering health services to communities in medically-underserved areas. However, there are also limits on the financial and human resources availability because oral disease is generally a low priority issue in health administration. In addition, composition of population in Sri Lanka has changed, in turn, has led to an increase in the proportion of the elderly. It should be serious problem that tooth loss reduces quality of life among the elderly. In future, the government and NGO should work in closer cooperation. Their activities should focus on preventive dental services rather than curative care to make up for the shortage of access to services in underserved areas. Specifically, conducting regular dental camps is necessary to deliver oral hygiene education and cleaning implements (toothbrush and toothpaste), and to spread oral health awareness.

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