GENERAL MEDICINE

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Elective in Sri Lanka

Elective 1: Peradinya Teaching Hospital, Kandy
Elective 2: Ruhuna Hospital, Galle

Objectives: To understand the healthcare system with particular regard to:
1) *government-funded medical care*
2) *traditional medical care*
3) *the prevention and control of communicable diseases*
4) *differences between Sri Lanka and the rest of the world, in particular the UK*

Country Profile in the Context of Global Health

Sri Lanka has a population of 20 million, a third of the UK population. The GDP is one tenth of that in the UK, as is the total expenditure on health per capita. This is reflected in the life expectancy, which is 69yrs for males and 76 years for females (respectively 8 and 5 years less than in the UK). Sri Lanka, a majority Buddhist country, has a long history of prioritizing health and education in order to attain maximum equality. With a 90% of literacy rate and wide use of healthcare propaganda, the Sri Lankans have managed to eradicate diseases of the third world such as polio and leprosy, and continue to strive for excellence in healthcare.

The Healthcare System

The Sri Lankan government introduced free healthcare for it people in the mid-1940s. As a country it is divided into nine Provinces, which are further split into Districts, of which there are 25. Sri Lanka in the early 90s saw a shift from a centralized government to Provincial Councils, which provide healthcare through preventative and curative approaches. Within each Province the task of providing preventative healthcare is allocated to the local Medical Officer of Health (MOH), Regional Malaria Office, School Medical Office, TB Control Office and STI/AIDS Office. Curative healthcare is provided by the District General Hospitals, District Base Hospitals, Divisional Hospitals and Primary Medical Units.

There are no General Practitioners in Sri Lanka, and patients are free to visit any healthcare professional without an appointment or referral. The hospitals have a general triage area where patients are clerked and sent to the appropriate clinic or ward. Clinics can often be overcrowded; in Kandy the general medicine clinic can see up to 800 patients in one morning. According to the local MOH in Kandy, this system often results in valuable expert time being wasted on cases that could have been dealt with in the community.

Western medicine is complimented by government-funded Ayurvedic medicine which is also free. Ayurvedic medicine is based on three regulatory principles known as Doshas, meaning "that which deteriorates". Each Dosha is comprised of various bodily humors that, if balanced, will generate health. The central concept of Ayurveda is to allow natural urges within the limits of balance. Essentially the body will remain healthy if everything is done in moderation. This is a reflection of the Hindu and Buddhist belief systems that have influenced the practice over the years, and a consequence is that nothing is ruled out; Ayurvedic doctors often employ western medical practices. The practice is co-ordinated by a government Ayurvedic Medical Officer and taught in separate medical schools, of which there are three in the country. Although research into the field is limited, it is widely used in Sri Lanka as a primary source of healthcare or as a complimentary service.

In addition to the Western and Ayurvedic systems provided by the government, there is also a large market for private healthcare, and most doctors work both for the government and privately.

Preventative Medicine

The MOH acts as a coordinator between the various other Offices, and is responsible for providing programs for immunization, school health, nutrition, basic life support, ante- and post-natal care, mental health and the prevention of communicable and non-communicable diseases. The MOH is also expected to provide training programs for healthcare professionals in these areas.

Disease prevention is implemented by a multi-disciplinary team of medics, nurses and midwives. However, in some rural areas there is a lack of access to healthcare professionals or they aren't well received. In these circumstances local women are recruited and trained to give basic advice to their fellow villagers.

Communicable Diseases

Communicable diseases are largely well controlled in Sri Lanka. Occasionally there are reports of Dengue fever and Leptospirosis, and a cutaneous form of Leishmania has recently appeared in the North of the country for the first time. Despite these rare occurrences, Sri Lanka's prevention of communicable diseases is a success story compared to the regional (SE Asia) average; the number of life years lost to communicable diseases in 2004 was 8% in Sri Lanka compared to a regional average of 52%.

The incidence of tuberculosis (TB) showed a sharp increase in 2007 but has remained stable since, with a low rate of multi-drug resistant TB thanks to the low default rates of the strict DOTS scheme. After the first two months of hospital-based DOTS, Public Health Inspectors visit patient's homes to ensure their adherence at home. If a patient defaults, they are taken back to hospital. The Sri Lankan TB treatment success rate exceeds that of the UK, at 86% compared to 77%. Thanks to this the prevalence of TB in Sri Lanka is a third of the regional average, at 73 per 100 000.

Childhood vaccinations are also above the regional average for TB, measles and DTP3. According to the WHO, the measles vaccine uptake for under-1s is 98% compared to 86% in the UK. This discrepancy may be due to the effects of the Wakefield study that created controversy around the use of the MMR vaccine in Britain due to possible links to childhood autism.

The spread of water-borne diseases has also been targeted with great success. The last two decades have seen a large improvement of drinking-water sources and sanitation facilities for urban and rural citizens. There has also been an attempt to educate rice-paddy field workers of the dangers of their work and when to visit a doctor.

The last malaria epidemic was in 1983 and no malaria deaths have been reported since 2008 thanks to an excellent surveillance system, distribution of adequate resources and a reduction in the number of mosquito vectors in the country. Public Field Officers (PFOs) working for the MOH are sent to people's homes to inspect for mosquito-breeding sites, and can fine or prosecute homeowners for creating high-risk areas or not providing larvae-eating fish for their ponds and lakes.

Non-Communicable Diseases

In contrast to the communicable diseases, non-communicable diseases (NCDs) are not as well controlled in Sri Lanka. The number of life years lost to NCDs was 30%, similar to the regional average of 31%. According to the local Kandy MOH, this problem is increasing exponentially.

Previously, the high NCD rate was thanks to the country's suicide problem. In 1999 it had the highest suicide rate in the world, but this has been brought down by addressing poverty and alcoholism. Now the NCD problem is due to more 'Western' problems such as obesity, diabetes, heart disease, COPD and road traffic accidents (RTAs).

RTAs account for 62% of lives lost in Sri Lanka, compared to 9% in the UK. This figure has been stable for many years but may not even reflect the true pattern of RTA deaths, since accidents are often mis- or under-reported. There are no laws to provide seatbelts or child restraints, and there is no pre-hospital care program. Alcohol is thought to be another contributing factor, although there is barely any data on this, possibly because the police are known to accept bribes. In addition, the WHO alcohol consumption statistics are thought to be inaccurate, which further obscures any potential analysis.

The most striking difference between UK and Sri Lankan medicine is that males receive very little primary care. There are national walk-in Well Woman Clinics across Sri Lanka that provide checkups and health education. Here women are screened for diabetes, cervical cancer and breast cancer. They can have their BMI checked and are taught how to perform breast examinations on themselves. However there is no male equivalent. Even the WHO country statistics have no data on male obesity, despite the obvious epidemic spreading through the country.

In contrast to prevention of NCDs, maternal and infant mortality are low thanks to widespread institutionalization of birth. Currently 99% of deliveries occur in hospital with skilled personnel attending. Most under-5s die due to prematurity, similar to the UK, and the mortality rate of this cohort is 17 per 1000 live births compared with a regional average of 63.

Summary and Reflection

The healthcare system in Sri Lanka has excellent outcomes in comparison to its surrounding countries. The infrequent cases of tropical and water-borne diseases mean that communicable diseases are no longer seen as the main problem, although to ensure this continues in future will require further healthcare propaganda in conjunction with careful screening and monitoring. In some cases Sri Lanka surpasses the UK with their communicable disease control. In contrast, the wake of commercialism and globalization has westernized the Sri Lankan diet and their disease profile. Curative measures are in place for these NCDs; however the country is lacking in a preventative and educational approach, especially in the male population. On reflection my visit to Sri Lanka has shown me the importance of communication between countries, as we can all learn from each other's strengths.

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