## <u>Elective Report</u> Guangdong Provincial Center for STI and Skin Disease Control

**Supervisor:** Dr Li Gang Yang **Dates:** 7-04-14 to 25-4-14

## Learning Objectives

To describe the pattern of disease, with a focus on infectious diseases, within the population of China in the context of global health.

Globally, an excess of 1 million people year are infected with a sexually transmitted infection every day. Furthermore, around 500 million people acquire one of 4 STI's, chlamydia, gonorrhea, syphilis and trichomoniasis, with the majority of STI's being asymptomatic.

The rate of sexually transmitted infections are on the increase in China, and is most noticeable in groups at high risk, such as men who have sex with men (MSM), female sex workers (FSWs), drug users and migrants. This field of medicine poses a great public health problem in China, with the spread of disease across the country. The infections that have contributed to this massive public challenge include HIV/AIDS, syphilis, gonorrhea, chlamydia and herpes simplex. This public health dilemma is reflected markedly in the high number of syphilis cases, a disease thought to be eradicated from China in the 1960s by free screening and treatment programmes. However, the disease now ranks in the top three notifiable diseases in the country. Syphilis, is an STI that requires mandatory reporting when new cases are found and notification is to the national survellaince system, a system vital for producing programmes to prevent and control the diseases. The number of cases of syphilis has increased 2.1 times since 2005, with 11.7 cases per 100,000 people with the disease in 2009. Interestingly, the rates of gonorrhea have fallen by around 30%, a similar trend found in other countries such as the USA.

The majority of STD cases are identified and treated in sexual health clinics, however many patients suffering from STDs find it difficult to approach doctors with their diseases due to fear of incarceration. The stigmatization of STIs and HIV is still highly prevalent in China, and the treatment of this condition can be improved in china by developing outreach services targeting both high risk and the general population. There have been attempts by the chinese government to address the threat of STDs to the health of the chinese population, including a national target to control syphilis and an aim to observe a decline in the incidence of this condition, in addition, to the eradication of congenital syphilis within 10 years.

Describe the health system and provisions in China and the contrasts of these systems with UK.

The current health system in China differs vastly to that found in the UK. Far from a universal free healthcare system such as the UK, access to medical services in China usually involves self-referral to specialist doctors, as there is an

absence of primary care services in the country. The current health expenditure is approximately 5% of total GDP, very low compared to countries such as the USA (15%) and the UK (8.8%). Patients that originate from urban areas do not receive subsidies or free healthcare, instead they are self paying or have to purchase health insurance, and although those from rural areas receive subsidies to the cost of their treatment, the inability to afford treatment can lead to patients that are in need to forego medical care, a terrible conclusion for those that are the most at need. The provision of medical care differs greatly in the rural areas and the major cities. Healthcare in rural areas is mostly provided in clinics that offer basical levels of medical care, however, mnny residents in rural areas visit public hospitals in the city to gain higher quality medical treatment.

In addition to sexually transmitted infections, there are several emerging public health problems that pose a problem to general health of the chinese people. These include illnesses caused by the high levels of pollution in china, the pathology developing from the millions of cigarette smokers in China and also the increasing incidence of obesitive among the chinese population.

To improve my knowledge in infectious diseases observed in the different health systems, including diagnosis and treatment of various diseases. In addition, learn lab skills to aid in the diagnosis and development of treatment for infectious diseases.

During my time in Guangzhou I observed many fascinating conditions that I never had a chance to observe during my medical training in London, due to the low incidence of the disease in the UK. One of the most interesting conditions that I observed in China was syphilis. Although this STI is on the increase in the UK, I have never come across any patient's with active disease. Interestingly, Guangzhou is a city with high incidence of syphilis, and during my time here I've seen patients with chancre, a whole family with a possible diagnosis of syphilis, and even a patient with neurosyphillis (with Argyll Robinson pupils). I was also given the opportunity to observe the laser treatment provided by the nurses to treat patients inflicted with genital warts, a method that I have never observed before. My experiences were not restricted to clinical work, as I was given permission to observe the diagnostic techniques used by the labs in the hospital to diagnose patient's with STIs, including culture and gram staining.

In addition to sexual health medicine, I was given the opportunity to shadow in various dermatological consultations. This was a surprising, but positive experience during my placement as it greatly increased my interest in this specialty! During the dermatology clinics, I witnessed many rare skin conditions associated with autoimmune illnesses, such as dermatomyositis causing erythema, skin amyloidosis and SLE. I was also able to improve my knowledge on common dermatological conditions such as psoriasis and eczema.

A fascinating area of medicine in china is the overlap between traditional chinese medicine and western medicine. It was interesting to see the application of ideas from traditional chinese medicine, to treat conditions using western medicine, such as the use of steroid injections in acupuncture sites.

My time in Guangzhou has been very fulfilling in both enriching my knowledge in medicine, and learning about the traditional chinese culture. It's an experience that I am unlikely to forget, I have met many wonderful people at the Guangdong Provincial Center for STI and Skin Disease Control, and hope to return in the future. There are many people I would like to thank for my great experience including Dr Yang Bin for her patience in teaching me, all the nurses and the lab technicians. And finally, a special thank you to Dr Yang, who I can't thank enough for his kindness at helping me get the best experience possible, and for his wonderful teaching and patience.