

ELECTIVE (SSC5a) REPORT (1200 words)

A report that addresses the above four objectives should be written below. Your Elective/SSC supervisor will assess this.

1. What public health and preventative initiatives are in place to help reduce transmission of diseases such as HIV and TB in Rwanda, particularly within rural communities

Partners In Health (PIH), known locally as 'Inshuti Mu Buzima' has been working with the Rwandan Government since 2005. I have been based at their headquarters next door to Rwinkwavu Hospital in Southern Kayonza – a region that is one of the poorest in the country. From meetings with individuals within the organisation, as well as field trips to local health centres, I have gained a deeper understanding of their involvement in public health initiatives, particularly in infectious diseases.

According to their Infectious Disease (ID) service, there is not much of an issue with tuberculosis in the local area. Specific HIV clinics take place at community health centres. PIH is involved in the training of nurses who run these HIV clinics. This training includes dispensing of treatment, blood tests, side-effect management and counselling. One change that is being piloted is dispensing patients who are stable on treatment with a three months supply of medications rather than the customary one month.

Another way that PIH is supporting local HIV patients has been in the establishment of adolescent (ages 10-24) support groups – an age group that has particularly poor outcomes compared to adult patients. These groups meet regularly and are given financial incentives for factors such as attending appointments and reducing viral load. These financial incentives are deposited in a group savings account and can be put towards a common goal at the end of the scheme. The group I spoke to were planning on putting theirs towards starting a shoe business. They also talked about the benefit of psychological support that they gained from meeting regularly with their peers.

One of the biggest health problems facing people of Southern Kayonza is malaria, as the region has the second highest endemic rates within the country. Education to those groups most at risk – such as rice farmers and miners – forms a large part of how PIH is supporting the local health system in combatting the disease. One new initiative currently being piloted with PIH is the installation of a community health worker in local schools. When a child is unwell, instead of being sent home, their teachers are trained to record their temperatures and send them to the health worker. The health worker performs a rapid malarial test. If they test positive, they are given immediate treatment. If they are negative, they are referred for follow up at a health centre. Although it has only been running since March, the scheme already seems to be very successful. On an average day around 45 children may visit the healthcare worker and around 60 per cent test positive for malaria.

2. Describe the pattern of health provision in Rwanda, particularly within rural communities. How has this changed in recent years with the involvement of organisations such as Partners In Health? And how is it different from healthcare provision in the UK and Vietnam?

In Rwanda, the government has devolved the financing and management of healthcare to local communities, through a system of health insurance providers called 'mutuelles de santé'. The population is divided into four groups with the poorest paying nothing and the richest paying the

maximum premiums at \$8 USD per adult. As of 2014, more than 90% of the population were covered by the scheme.

The structure of the Rwandan health system is made up of three levels. At the top level is the National/Central Health system which is run by the Ministry of Health (MOH). At the intermediary level are the Provincial hospital, District Hospitals and Health Centres. At the peripheral 'community health system' level are the community health workers (CHWs). These health workers are elected by their village or 'Omuugudu, the only qualification needed being the ability of read and write. Three CHWs are appointed to each Omuugudu; two generalists – a male and a female known as a 'Binome'; and an 'Agent de Santé Maternelle' (ASM) who is responsible for maternal health. All three CHWs attend central training provided the Ministry of Health but all attend refresher courses at PIH. Within their communities the CHWs are trained to recognise and treat some conditions such as malaria. They are also trained to recognise signs of serious conditions, so they can refer their patients to be seen at a health centre or hospital if necessary.

PIH has been working with the Rwandan MOH since their introduction to the country in 2005. PIH are involved in refresher training of CHWs; providing HIV Accompaniment; data collection and analysis; program management and supervision for better quality of care and services; and training for ASMs on maternal and child health.

Vietnam is currently working towards a universal health care system. At the end of 2014, 71.6% of the population had health insurance. The government subsidises 80% of hospital fees for the poor and near-poor, as well as 100% for the very poor and ethnic minorities living in disadvantaged areas. By contrast the UK the healthcare system has universal health care coverage, is publicly funded by, and accountable to the government.

3. How do non-governmental organisations such as Partners in Health work with Governments such as the Rwandan Government to implement healthcare projects and improve health provision in these countries. How are these funded? And to what extent is the population health still affected by the recent historical/political events of the Rwandan genocide?

Organisations such as PIH work closely with the MOH in Rwanda. PIH has always focussed on community-based health projects; its first project helped to provide HIV care in Cange, Haiti. As part of their general remit, PIH helps build hospitals and other medical facilities, hires and trains local staff, and delivers a range of healthcare, from in-home consultations to cancer treatments. In 2011, PIH helped the MOH open Butaro District Hospital in Burera district. The hospital has become the country's leading centre in the treatment of cancer. As has been outlined above, PIH also helps in the training of CHWs and in the evaluation of community health services. Through pilot schemes it helps implement new healthcare strategies, particularly in the provision of rural healthcare. For example Rwinkwavu health centre was the first to pilot a new scheme which assigned specific clinic days for non-communicable diseases: heart failure, hypertension, asthma, oncology and diabetes. Due to the success of the approach, this strategy has been adopted by healthcare centres around the country.

It is difficult for me to comment on the extent to which population health is still affected by the 1994 Rwandan Genocide. What is clear is the commitment of everyone within the country, from Government

to individual level, to improving the health of their population. With life expectancy having increased by 19 years over the period 2000 to 2012 there can be no doubt in the success from many major health indicators. While a significant portion of Rwandan life revolves around not forgetting the victims of the Genocide, my impression is that the focus is now on looking towards the country's future. There are still significant gains to be made, particularly in relation to the significant levels of poverty still present within the country. A common theme repeated to me by the health professionals I met were the high levels of malnourishment, that impacted everything from access to services, to a patient's ability to take HIV medication. It will be interesting to see how the Rwandan Government and organisations such as PIH continue to work to improve the lives of the poorest Rwandans.

4. Gain an insight into the challenges of working as a doctor or healthcare worker in a low-resource environment. Gain insight into the need for and implementation of health development (research) projects in rural communities.

Although I have only been here a short time, I feel as though I have gained an insight into some of the difficulties of providing healthcare in a rural environment such as Kayonza district. Probably the most striking thing initially was the quality of the roads and the lack of vehicles. The hilly landscape – 'les milles collines' – that Rwanda is famous for makes roadbuilding difficult and many are in poor condition due to the heavy rains. Visiting one of the furthest-away health centres 'Ndego', I was struck by the distances and the difficult terrain involved in getting to Rwinkwavu from villages in these areas. The distance travelled by patients could be a limiting factor in seeking help. For example, I witnessed an incident at a health centre where a returning patient had not gone to the district hospital for some necessary investigations – presumably because of the distance – and had instead just turned up at their follow-up appointment at the health centre. This appears to be a common occurrence.

Another difficulty is the general poverty of the local population. As mentioned previously, many patients reported difficulty in taking their anti-retroviral medication (which should be taken with food) when they had nothing to eat at home. This has led to the establishment of a warehouse on the Rwinkwavu Hospital grounds which houses food for malnourished patients alongside medications. Although we have dieticians in the UK, I have not seen malnutrition on the same scale while on placement in the UK. I was also struck by an occupational health training session for Rwandan medical students which focussed on taking a good occupational history from mining workers with an emphasis on how to advise about health and safety. This is not something I have had to consider as part of my training in the UK.

However, for all these differences, medical professionals from different countries still have more in common with each other than what separates us. Even when given teaching on pre-eclampsia management in French, I was impressed by the universality of the 'language' of medicine; I enjoyed discussing our differences in first-line treatments. Although there may be a difference in the environment within which we practice, we share the same passion and commitment to improving the lives of our patients.