ELECTIVE (SSC5b) REPORT (1200 words)

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

1. What are the prevelant medical conditions seen in urban Zambia and how do they differ to urban areas in the UK?

In Urban Zambia, infections, burns and road traffic accidents were far more common than in urban areas of the UK. Infections were frequently undertreated, and for example cellulitis frequently spread to cover entire limbs, and its dangerous sequalae Necrotising Fascitis was a large burden on the surgical department. Also, burns were very common due to the number of open flames used in houses, and for a hospital the size of Livingstone Central to have a 6 bed burns unit would be very out of place in the UK. These burns were most frequently also experienced by young children who were left close to the fire for warmth at night. Alongside these, hernias (particularly inguinal hernias) were very common amongst young working men, with around 1 in 3 patients we treated whilst on surgery being part of this group. Our consultant believes this is due to working long hours doing manual labour and working on building sites with little machinery to help lifting. These were repaired electively and caused a large number of breadwinners to be out of action for years at a time, throwing families into poverty. Surgically, there were also far more people presenting with late stage acute abdominal disorders, causing perforations. This meant that a peritonitic abdomen was an incredibly common first presentation of appendicitis or bowel cancer. As before, this is related to the cost of an appointment and people not coming to hospital until incredibly unwell.

These conditions are very different to those seen in the UK, where there is a far higher prevelence of "lifestyle conditions" such as diabetes, hypertension, stroke, and heart disease. These were still present in Zambia due to the large number of smokers, however there was little to no obesity.

In Obstetrics and Gynecology, it was apparant that cervical cancer, particularly fatal late stage cervical cancer, was far more common. This is to do with lifestyle factors- such as early first age of intercourse, high numbers of sexual partners, smoking, and the prevelence of HPV due to a lack of vaccines. This is also related to the lack of uptake on the screening programme instigated in Zambia.

2. How is healthcare provisioned in urban Zambia, and how does it differ with Rural Malawi and rural/urban areas of the UK?

In Zambia- the hospitals are free for admission, however tests and investigations cost a large amount of money. Surgery is also incredibly expensive, and requires many family members to chip in. There are some free government-run labs, but when talking to the patient (for example to send off a core biopsy for a suspected breast cancer) surgeons would sometimes urge them to spend more to get their

investigations back in less than a week, compared to a few months. In the previous example this was most common, as they explained to the patient that it was incredibly importent to start treatment as soon as possible if the news was not was the patient hoped.

Comparitavely, rural malawi did the exact opposite in the clinic i was working in- they would charge for a single appointment, and then not charge for treatment (aside from asthma inhalers, which were expensive), nor investigations nor follow up appointments. This was to encourage people to come with conditions requiring long term follow up such as heart disease or hypertension or HIV/ AIDS.

Both Zambia and Malawi filled the gap of their inadequate access to health resources by allowing most drugs to be bought over the counter. Locals i talked to frequently identified their own symptoms and treated themselves with antibiotics their friends recommended. This filled the hole left by having an incomplete primary care service, however such inappropriate drug use will be contributing to antibiotic resistance. It was interesting to think about what was more important- providing healthcare to people who cannot afford a hospital appointment / where healthcare is lacking, versus keeping antibiotic resistance at bay.

3. How is surgical care provided in Zambia, and how does it differ to surgery in the UK? What notable equipment/protocol differences are there, and whatsteps are there to ensure safety during administration and maintenance of anaesthesia?

Surgical equipment in Zambia included far more resuable items than the UK to save on cost. All the drapes and swabs were reusable, put into a bucket and then autoclaved ready to be used again. There was also limited to no suction available for most procedures, so swabs were used far more frequently, and as an assister my main job would be to hold a large number of swabs for the surgeon to use frequently. There was also no cauterisation, causing far more clamps to be used to stop the flow from the cutaneous vessels around the incision.

Interestingly, the lack of cauterisation equipment allowed the use of methylated spirits, rather than iodine, to clean the surgical site. This cost less money, and left a powerful odour in the air which was incredibly hard to stomach for the first few procedures.

Whilst scrubbing up, a similar protocol was used to the UK, however simple hand soap was used instead of iodine and disinfectant. The surgeons were very diligent with their hygiene, and would make sure they could trust me to scrub up before allowing me to do it alone.

In terms of administration of anaesthesia, there were no safety protocols used. The WHO Surgical Checklist was not used by the doctors, and the person operating the anaesthetic machine was frequently operating both machines in each of the 2 theatres.

4.To further my surgical skills appropriately, while working as an effective and trusted part of the team. While focusing on surgery, also use this opportunity to explore other departments in my 3 weeks and be able to contrast medical care in this urban setting with my prior rural elective.

Unfortunately, as I was not with any department for more than a week, my surgical skills could not be improved as no doctor was aware of me. I did manage to explore medicine, surgery and obstetrics and gynecology, giving myself a good breadth of experience in the hospitals. I was able to see what the differences were in a hospital compared to a rural clinic, and compare both to my experiences in the NHS. An unforgettable experience all round.