

Elective report Mseleni Hospital, KwaZulu-Natal

The second half of my elective was spent in Mseleni hospital, a former mission hospital in a remote area of northern KwaZulu Natal, South Africa. The hospital has 184 beds across 6 wards; and an outpatient department, which acts as an A&E, a GP clinic, and a referral centre for smaller nearby clinics. There is also a therapy department, a radiography department (with x-ray and ultrasound machines), a laboratory, and a pharmacy.

Describe the pattern of disease and associated illnesses in patients in Mseleni.

There are a wide variety of diseases and illnesses treated in Mseleni hospital, including those we commonly see in the UK such as hypertension, diabetes, and upper respiratory tract infections. However in contrast to the UK, South Africa has a very high incidence of HIV, and this is reflected in the prevalence of HIV related illnesses and opportunistic infections seen in the hospital. During my visit I met a number of HIV positive patients with recurrent respiratory tract infections, Herpes Zoster infections, oral candidiasis, chronic herpes simplex infections, Kaposi's sarcoma, CMV infection, and recurrent bacterial infections (such as pneumonia, empyema, meningitis, pyomyositis, etc.)

Related to the high HIV rates, there are associated large numbers of TB patients, for whom there are two separate wards. There is also a lot of screening and disease management in OPD.

Other common illnesses are schistosomiasis due to swimming and bathing in local infected waters; scabies and worm infestations; childhood malnutrition; and paediatric burns patients.

A particularly interesting condition is Mseleni joint disease (MJD), which is a form of osteoarthritis highly prevalent in Mseleni, affecting patients much younger and severely than osteoarthritis normally would. It affects women more commonly and severely than men and most people with MJD end up needing bilateral total hip replacement. In the area directly north of the hospital, it affects 1 in 2 women.

There were also quite a few trauma cases from assaults in OPD, and I was able to practise cleaning and suturing knife wounds which was a new experience for me.

What is the standard HIV treatment regime used in Mseleni hospital? And what systems are in place to encourage adherence to treatment?

The management following a positive HIV test is dependent on age and gender of the patient, CD4 count, and associated infections. (See algorithm)

Pre- and post- test counselling is provided to help the patient understand the diagnosis and to address any concerns that they may have. If given a positive diagnosis (by two positive rapid test results or ELISA), patients and their families are encouraged to join support or peer groups. They are also counselled on preventive methods of reducing spread of the disease. Patients are counselled to: use condoms during sexual intercourse; seek early treatment for sexually transmitted infections; and to safely handle any blood spills. To aid and promote condom use, Mseleni hospital provide free condoms which are in boxes by the main entrance and OPD.

How does the set-up of Mseleni hospital differ to the typical NHS hospital in London?

The most noticeable differences between Mseleni hospital and UK hospitals that I have had placements in are the available facilities in the hospital, the staff rotas and responsibilities, the access system, and language.

Mseleni hospital has a laboratory where basic tests can be carried out (FBC, U&E, glucose, LFT, AFB, MC&S, malaria, etc.) but when more specialist tests are required, samples are sent to a larger hospital lab. The blood results are printed on paper and kept in the patient's medical records, unlike in the UK where results would be uploaded onto an electronic system, which can be accessed via the hospital intranet. This means the results can be more difficult to find and compare, and it takes longer to work out the trends of results.

The other major difference in available facilities is the imaging. Mseleni hospital has an x-ray machine and ultrasound machine, but no other imaging methods available. The radiographs are also on film and viewed on a lightbox or held up to a light source (often a window). There is also no radiologist in the hospital and so doctors who order the radiographs interpret them themselves. This seemed strange at first, as I had been used to looking up scans on a computer and reading the radiologist's report to find out the results in the UK. This means that in Mseleni, doctors rely on their clinical judgement and own interpretation of radiographs to make decisions more than in the UK, which I feel is good for keeping these skills in practice. The ultrasound machine is used in OPD by many of the doctors and if a more detailed report is needed, they are referred to one of the doctors in the hospital who has higher training in it.

There is usually a teaching ward round at 7.30am for all of the doctors led by the senior doctors, and then each doctor will spend the rest of the day on their assigned wards, and complete one session in OPD or a satellite clinic.

Whereas in the UK healthcare is divided into primary, secondary and tertiary care centres, in Mseleni all of these seem to merge. I also noticed that in Mseleni, some patients pay for treatment either privately or through medical insurance.

Describe differences and similarities in surgery in Mseleni hospital compared with London hospitals.

During my time at Mseleni, I spent some time in the operating theatre observing and assisting in surgery. I enjoyed the larger variety of surgeries performed in each session compared to the UK, where most of the surgeries performed in a session would be very similar (e.g. a session of hernias, or laparoscopic cholecystectomies). In Mseleni, most minor or general elective surgeries take place on one day of the week, caesarian sections take place as and when required, and orthopedic surgeries take place on another day. There are a few doctors who perform surgery but they are not restricted to surgery in the same way that in the UK doctors would specialize in either medicine or surgery. In Mseleni, most of the doctors have a variety of responsibilities and so I enjoyed being able to do different things each day.

Most of the surgery in Mseleni is done under local anaesthetic using lignocaine; or spinal block; or ketamine. The surgeon normally takes the role of the anaesthetist as well and keeps an eye on any monitors that the patient may be on during the procedure. There is minimal monitoring during the procedures, and I

often thought that the theatre felt quiet and relatively empty compared to what I had been used to in the UK. There were also some limitations related to available resources, for example it was difficult to find biopsy tongs that would fit through a sigmoidoscope, scissors were often blunt, and there were sometimes missing parts to sets of equipment that was needed. I also noticed that the instruments and theatre gowns and drapes were all reusable and cleaned in between use, unlike the UK where more and more is designed to be one-use.