

Report by Amy Baigent on Medical Elective Placement Nzega District, Tabora Region, Tanzania

I am a fourth year medical student, but prior to 2005, I had believed that studying medicine would be an unrealistic career option for me, given my non-science A-Level choices. However, on a volunteering trip to Tanzania in Summer 2005, I was given the opportunity of work experience in rural health clinics and mother and baby centres. I became so interested in the work, that returning to England, I made the decision to withdraw from the University English course I had enrolled upon and managed to attain a place on the Pre-Medical Course affiliated to the University of Sheffield.



Me and my placement partner with the scrub nurse in theatre

Visiting rural Tanzania dictated the career path I am embarking upon and my decision to return to the country on my elective placement was based partly on my wish to work under the Doctors from my travels who encouraged me to pursue this career. I hoped to gain from their knowledge of medical practice, especially in the field of obstetrics and gynaecology, in a world where equipment and drugs are limited and rationed. My special interest in the placement was to travel out to remote mother and baby units; typically run by a single midwife and possessing only one bed, no electricity and no running water.

Consequently, in June 2011 I travelled to Nzega District Hospital, Tanzania to undertake my medical elective placement. Nzega Hospital is a small government-run hospital of 170 beds served by nine Doctors and Clinical Officers. The hospital has nine wards including male, female, paediatric, infectious diseases and maternity, alongside an outpatient department, dental unit and operating theatre. Working in cooperation with rural health clinics and dispensaries, the hospital serves a population of 417,097.

Tanzanian hospitals can broadly be divided into three categories; private, missionary and government. Government institutions such as Nzega District Hospital are widely considered to offer the most basic level of health care, although at the cheapest rates. This does not, however, mean free for all at the point of delivery, as with the United Kingdom's National Health Service. It is unusual for government services to be used by anybody who can afford to fund their own health costs fully, and interesting to note that all central government figures travel outside Tanzania for their health care. Government institutions charge patients for 50% of the cost of their care, with exemptions applying to those too poor to contribute, children under five years, pregnant women, those in an emergency situation and patients diagnosed with sickle cell anaemia, HIV, tuberculosis, leprosy, hypertension or diabetes. Basic hygiene and nutritional needs are expected to be provided by the family of inpatients.



Purchasing stethoscopes and automatic blood pressure machines for the satellite health clinics in Nzega District

The routine I adopted throughout the placement was to firstly attend the morning Clinical Meeting where I was able to find out if any surgeries were anticipated or whether there were any cases of particular interest. These included trauma patients, patients with tropical diseases I had

little experience of from training in England and obstetric complications. I regularly attended the antenatal clinic, delivered babies in the maternity unit and assisted in Caesarean sections. Through attending the outpatient department, I was also able to learn about the aetiology, presentation, diagnosis, treatment and follow-up of patients with common tropical diseases, such as malaria, parasitic infestations, leprosy and schistosomiasis.

When organising my elective placement, I had expressed a special interest in travelling to satellite health clinics and remote mother and baby units. I visited several clinics, but focussed my placement in the mother and child unit at Mwanhala village. Here, I was able to take part in education and vaccination campaigns for the prevention of diseases such as malaria and neonatal tetanus. Tanzania is currently undertaking a public health initiative to reduce mother to child transmission of HIV and it was of particular interest to attend antenatal clinics at Mwanhala clinic, where I was able to counsel and test for HIV and help educate patients about the importance of safe sexual practices.



Above: Trying the new equipment at Zogolo Health Centre.

Below: Sterile and non-sterile gloves, syringes for injection, ergometrin and oxytocin to help mothers in labour at Mwanhala Mother and Baby Unit



Above: Two children with splinted club feet with their mothers

Below: Mothers at the ante- and post-natal clinic

In these satellite dispensaries and mother and child units there is severe shortage of provisions. My supervisor from Nzega District Hospital explained that the lack of such simple equipment as blood pressure meters and stethoscopes means that the first signs of a patient deteriorating are often missed, leading to patients becoming seriously ill with diseases such as cerebral malaria. Having analysed the list of provisions stocked by each clinic, he pinpointed three in particular need of such supplies. The generous donation of the TDT meant that we were able to provide this equipment and also see it being put to good use caring for patients as we worked in the clinic. Mwanhala clinic, in particular is known to be particularly poorly equipped. The nurse working here is extremely dedicated and considerate towards the needs of his patients, yet we were able to see immediately the strain put on him to allocate resources appropriately. This was well demonstrated whilst in the labour room, where two village women were giving birth at the same time. With only one delivery kit, the nurse was forced to



Weighing children at the Nyasa Dispensary paediatric clinic

Splinting club feet using Plaster of Paris

A student nurse assesses foetal heart rate using a fetoscope

choose the woman he felt to be in greatest need, leaving the other vulnerable to bleeding and retention of placental products. It was therefore decided that a good use of TDT's generous donation would be to better equip this centre and improve ante- and post-natal care for the local women for up to six months. Sterile gloves, needles to inject vaccinations against neonatal tetanus and polio, ergometrin and oxytocin to reduce maternal bleeding after delivery and a brand new delivery kit, alongside other essentials such as handwashing facilities and sterilisation equipment were purchased and put to use immediately. It was reassuring to see how well appreciated these supplies were and spend the next week in the unit in the knowledge that the expectant mothers could be properly cared for.

My elective placement was enormously enlightening and I felt gave me a true insight into the daily workings, challenges faced, positive and negative aspects of a government hospital in rural Tanzania. Prior to this experience, I had thought that I would like to work for a number of years in a Tanzanian hospital. My long-term plan was to return to work in rural Tanzania as a qualified Doctor in the field of obstetrics and gynaecology; learning from the medical practices currently employed in the country and teaching any advances which I will learn during my future training which may be applicable in a resource- poor setting. This elective placement was meant to be the first step in this long-term goal, giving me the opportunity to make contacts in the hospitals where I planned to return in the future. This placement, however, has made me realise the enormity of this challenge and how demanding it would be to retain my professional values in this less formal, less accountable healthcare system. I have come to believe that the best way of improving the care provided by the hospital in the future is not to return in the capacity of a Doctor who introduces new surgical techniques or medical protocols, but educate and strictly enforce the basic professional competencies we take for granted in the UK, for example hand hygiene, aseptic technique and the accurate documentation. The benefit of these simple measures would be vast and if I were to return to the country once qualified, as I originally intended, it would hopefully be in this capacity.

Many Thanks for the generous donation from TDT, which allowed me to complete our aim of better equipping some of Nzega District's satellite clinics, in particular that at Mwanhala, where the dedication of the nurse and midwife in charge will ensure that these items are put to the best possible use.