

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY (KNUST) DISTRICT HOSPITAL,  
KUMASI, GHANA**

**DATES ATTENDED: 1<sup>st</sup> April 2010 - 18<sup>th</sup> May 2010**

**INTRODUCTION**

Having previously been to South Africa twice, I had planned to return to Johannesburg to pursue an elective in acute and traumatic medicine. However, Dr. Abruquah, a doctor and PhD student in Nottingham advertised for students to come to the KNUST district hospital. I am unsure what made me choose to pursue this, perhaps a decision to see another part of Africa or perhaps just for a new challenge. However, I know that I had made the right decision when at the end of my time there I didn't want to leave! This short essay cannot do full justice to all of my experiences at KNUST, as my personal reflections ran to over 15,000 words – however, I plan to reflect just a few key experiences in the hope that future students will also want to attend!

On my arrival in Ghana I was greeted by Ade, another Nottingham student and Michael – a member of the laboratory team at KNUST. From this good start, the staff of University hospital were welcoming, helpful and showed enthusiasm in helping the two of us get the most out of our elective. Even though the hospital was small we were provided with the freedom to partake in a number of areas of medicine including Obstetrics & Gynaecology, Surgery and the area I chose to personally focus on - Internal Medicine.

**ELECTIVE OBJECTIVES**

My elective goals were very clear and I hope to provide a short summary of how I was able to meet them during my time at KNUST.

**1) *To gain practical experience in my preferred career path of acute medicine***

*As well as seeing and dealing with multiple acute cases, including encephalitis, acute GI bleeds, stroke, acute liver failure (Hepatitis B is endemic in Ghana) and acute sepsis I also had the opportunity to deal with many acute tropical illnesses rarely seen in the UK such as tuberculosis, malaria and enteric fever. I was encouraged under supervision of an excellent registrar (Dr. Okyere), to make my own clinical decisions and then receive feedback on those decisions. This vastly improved my confidence in clinical medicine. In addition I also had the opportunity on an isolated occasion when other medical personnel were unavailable to take part in the resuscitation of an acutely unwell encephalitis patient with my colleague Ademola Oteilan. Situations like this further allowed me to exercise my clinical skills gained from my time at medical school and refine them before starting my clinical job in August.*

*In addition to seeing acute cases, the nice thing about working at KNUST was the ability to also see and follow-up chronic cases. This included in an outpatient role doing diabetes and HTN clinic. Seeing 60 patient in 3 hours inspired me to propose collaborate with a number of staff in research into culturally-sensitive education programme to assist and empower patients in the management of conditions associated with metabolic syndrome such as diabetes and hypertension, with plans to publish the research data in the near future. On the ward one chronic case that stood out was a child who survived encephalitis who we were able to stabilise and even start basic physio as part of his rehabilitation. The follow-up I gained in a small district hospital on many similar cases gave me a clearer idea of the patient*

pathway and progression of diseases which can be difficult to gain in the larger hospital such as QMC, Derby etc where I have done my training.

Furthermore in addition to working in KNUST district hospital, I was also able to attend an international conference in cardiology in central Kumasi that assisted me in optimising management of cardiac patients I saw in Ghana as well as teaching me valuable lessons I will be able to take back and apply when starting my first medical job -being acute medicine in the QMC.

**2) To provide medical care under supervision and experience the challenge of working within another rural healthcare system, where the luxuries of CT scanners and expensive lab tests do not exist - this will enable me to improve my clinical skills whilst being genuinely useful within a community**

Ghana has recently instituted a National Health Insurance Scheme (NHIS) on a model similar to the UK, however it is not comprehensive. In a system where patients often have to pay for every item of medical equipment – down to every test, cannula, glove used in their care as well as many medications (though some are included under NHIS) I had to become far more careful in organising such things! This was also why I initiated research into education in the last objective – so that patients could become less depended on buying education. The need to pay for aspects as medical treatment led to some interesting ethical dilemmas especially compared to the public healthcare system of the UK where tests such as CT are given based on clinical need. When two patients on the ward needed a CT (approx 380 cedis - £190) – one for an acutely unwell child with a possible space occupying lesion/encephalitis and the other for a single fit which may or may not have occurred – the latter patient was able to obtain the investigation first due to being financially more able than the former. This was something which was distressing but did allow me to gain a greater appreciation of how lucky we are to have the NHS – a system which at times I have wondered if patients and members of staff (myself included in both categories!) really do appreciate or take for granted.

The second limitation of being in a district hospital was that some tests such as electrolytes were not routinely available on-site! This led to some out-of-box thinking such as organising an ECG to check for hyperkalaemia in a patient with suspected renal failure and really relying on clinical skills to look for Chvostek's and Trousseau's sign to detect hypocalcaemia in a patient. These are just two small examples of puzzles experienced daily challenging and I hope improving my clinical acumen! Finally when considering provision of care I have to also reflect on the many skills I gained at KNUST including ascitic tap, improvised chest drains and though less exciting my ECG interpretation skills vastly improved at ECG clinic!

**3) To do all of this in a location that provides me plenty of opportunity to travel and experience a culture I have not previously experienced**

As well as the cultural differences in funding of the health service I have previously alluded to other cultural differences in healthcare I saw focussed on the role of the family and the role of herbal medicine. The family had far more control and say in the patients condition – they were expected to feed, assist the nurses on occasion, collect medication and crucially fund the patients treatment in many cases. Without the funding the patient may not be able the receive treatment which

*made it important to keep the family onside in treatment decisions, something which is less practised in the UK. The herbal pharmacists also gave me an insight into an alternative culture of medicine which though I had my reservations on some area, felt that the health system was overall gaining from the increased integration of the two "schools of medicine".*

*I should add that whilst I have worked hard, I was also been touched and kept busy with a number of non-academic activities in my time there. Staff at the hospital including doctors, herbal medicine students and biomedical sciences were eager to show me the sites in and around Kumasi as well as enabling me to become immersed in many different aspects of Ghanaian culture. Their kind hospitality, also afforded in a similar way to me by the staff at the guest-house where I have stayed in addition to spontaneous acts of kindness by many local people I have met has meant that I will leave Ghana with positive experiences and memories that I will share with my friends, family and colleagues for years to come. For this and so many more reasons I express my gratitude to the KNUST director Dr. Yaw Bio, Dr. Abruquah, the staff of KNUST and all in Ghana who have made my elective unforgettable.*

## **CONCLUSION**

I think my time in Ghana is best summed up by my feeling when I left. I wasn't ready to leave and I was sure that I would return in the future – whether for a few months as an elective or even as a year or two before or during speciality training, I know I will be back! I would strongly recommend this elective for any students seeking an elective within a friendly country in a welcoming hospital with opportunities to partake in a number of specialities or focus on one particular speciality of the students choice! Should you wish to pursue an elective in Kumasi, Ghana I suggest the following documents:

KNUST Medical Elective information:

[http://nle.nottingham.ac.uk/eresources/ELECT/knust\\_medical\\_electives\\_info\\_pdf\\_\(2\).pdf](http://nle.nottingham.ac.uk/eresources/ELECT/knust_medical_electives_info_pdf_(2).pdf)

[Please note that despite being attached to the university, KNUST hospital is classed as a and the experience gained will be that of a small district hospital serving the university and surrounding rural area]

KNUST Medical Elective Application Form:

<http://nle.nottingham.ac.uk/eresources/ELECT/knustmedicalelectivesformpdf2.pdf>

## **CONTACT INFORMATION**

### **ELECTIVES CO-ORDINATOR**

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## **QUESTIONS ABOUT THE ELECTIVE FROM A STUDENT PERSPECTIVE**

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