INTERNATIONAL ELECTIVE _ FINAL REPORT

Kenyatta National, Teaching & Referral Hospital, Nairobi, KENYA
New Nyanza Provincial General Hospital, Kisumu, KENYA
By Niklas Rencher, (with Abigail Moss, Flavia Reid, Jasmine Williams & Bradley Finch) _ GMEP 2018

Overview of Our Elective

We spent eight weeks on elective in Kenya; four at Kenyatta National Hospital in the capital, Nairobi and another four weeks at New Nyanza General Hospital in Kisumu on the Western side of Kenya bordered by Lake Victoria. This dual placement was deliberate since it was one of our mutual objectives to gain as much knowledge and insight of the Kenyan medical system. These two hospitals are at the top of the public healthcare delivery apex (Kenyatta being the only Level 6 facility in the country and New Nyanza being one among several Level 5 hospitals).Our time was divided between the departments of Surgery, Pediatrics, and Obstetrics & Gynecology with each of us spending a significant amount of time in the Casualty departments (Accident and Emergency).

In the course of our time at both hospitals, major ward rounds were conducted by the consultant physicians accompanied by other senior doctors including the departmental heads. However, we spent most of our ward time accompanied by the junior doctors (Chief medical officers), the resident doctors (often referred to as Registrars- they are doctors in specialist training to qualify within a specialty) and other students, both local student and students from abroad. In the pediatrics wards (including the neonatology wards) there was always so much to see and do. We were often emotionally frustrated with the state of public hospitals in Kenya, especially the needlessly high mortality due to mismanagement. There were also many students on internship. The Casualty departments were often the first point of contact between the hospital and patients allowing us to see high incidences of surgical cases and infectious disease. This would allow us to make follow-up with the cases we found to be of interest within the specialist departments of our rotation schedules and the prospect to develop clinical techniques in patient management and diagnosis, simple clinical and surgical procedures. We witnessed high incidence of surgical cases deriving from road accidents (fracturing and complete splintering of bones, suturing, corrective procedures and grafting). Kenyatta Hospital had a specialist Burns Unit where it was possible to observe and participate in the management of burns patients. A tragic oil-tanker explosion that killed many and resulted in many cases of burns occurred during our stay causing the unit to be inundated with patients who had as high as 60% burns. This one incident remains etched in our minds and was perhaps the greatest challenge to our time in Kenya.

Our program organizer gave us great value by facilitating a placement that allowed us to go both these hospitals and going the extra mile to ensure we had local support in both Nairobi and Kisumu. Placing at both these hospitals gave us the opportunity to understand in greater detail, the referral system of Kenya's healthcare system and the development challenges faced by public healthcare facilities in this developing country. Our program organizer also facilitated our participation in two medical camps in Nairobi and Kisumu and field trips to the Centers for Disease Control and Kenya Medical Research Institute in Kisumu which provided superb opportunities to see the correlation between clinical work in the hospitals and community health programs deployed to mitigate the efforts of the clinicians as well as observe clinical research and trials. As clinicians-in-training, it was fascinating to see firsthand, actual clinical cases that we had hitherto only read about in books and to develop insight and perspective on an entire system of healthcare with regard to issues of management and funding and how these factors affect the quality of healthcare delivered to the citizens of a country. It was interesting to also observe the interactions and trends between the delivery of healthcare on the one hand; and other factors such as poverty, education, accessibility to water and sanitation, culture and socialization on the other hand.

Overall, our elective experience was widely varied, very educational and highly fulfilling. The program was well organized. Besides the challenges of adapting to a new culture and environment, daily living over the two months was relatively comfortable. The housing was adequate with the opportunity for home stay in Nairobi and subsequently thereafter, in Kisumu, in a well-secured private guesthouse with private quarters with self-catering facilities. Using public transport was always a quirky affair and we could each find at least ten adjectives to describe it ranging from "adventurous" to "downright chaotic" and as many others that range between those two! The program organizer, Odyssey Africa, also provided us with invaluable in-country support and orientation and assigned us two liaisons, Jonathan and Victor, in Nairobi and Kisumu respectively, who were of immeasurable support in showing us the "ropes" and also offering us bi-weekly Swahili lessons. They also took exceptional of measures to ensure that we felt secure and also mitigate against the likelihood that if anything did actually go wrong that we would be taken care of.

Learning Opportunities

Whilst the core of any medical elective is hinged on clinical exposure objectives, it was our profoundest desire that our experience in Kenya would not only meet these objectives but also provide us with the real opportunity to understand the country and its medical systems. We had each done some reading on the state of public health in Africa and realized that the opportunity to take our elective anywhere in sub- Saharan Africa would be both challenging and intriguing. We were particularly keen to learn more about maternal and child health concerns, the progression of lifestyle and non-communicable diseases among the population and obviously the challenges of healthcare delivery compounded by underfunding and management concerns. This, we considered, would provide an ideal clinical environment to learn more through both

observation and participation. It would also provide us with an opportunity to learn about Africa through interactions with other students.

At the outset, we expected some challenges with language and cultural barriers and perhaps the usual resistance that comes from new environments (both from ourselves and from the teams of doctors and other staff who we may have to work with). In truth though, we were all, in general, very surprised at the open and welcoming attitude we were received with at Kenyatta Hospital. The hospital is a teaching hospital and the students, including the Masters students were really friendly and made our time there particularly nice. We also interacted with five other students from Sweden, and UK. There were limited language barriers here and usually only with patients. This was however easily assuaged by the presence of other medical students and junior doctors who were very helpful.

Clinic time was interesting and involved several stints seeing HIV/AIDS patients for routine follow-up, initiation into ARV programs, initiation/adjustment of ARVs, and the diagnosis and treatment of opportunistic infections and other HIV related conditions. Here we had the opportunity to see a wide range including Sarcoma, Pneumonia, Candidiasis and pruritic papular in addition the ARV related conditions lipodystrophy and polyneuropathy.

There was abundant opportunity for each of us to witness and manage hands-on, patients with widely varied general medical and infectious conditions which are much more widespread or exclusive to this part of the world. On the Outpatient wards, common presenting complaints included fevers and coughs and their attendant symptoms of running noses, headaches and muscle pains; dehydration, general weight loss and diarrhea which was particularly common among children under 7 years, thrush and rashes; and often a combination of all these. Labs would be invariably limited to basic blood, sputum, urine and stool tests for lack of advanced lab testing equipment and methodologies (this is largely the result of underfunding of healthcare in the country). As a result of limited diagnostic facilities, the majority of diagnoses are treated with broad-spectrum and empirical therapies sometimes leading to misdiagnosis and wrong dispensation and management of patients. Some of the more common presenting illnesses included Tuberculosis (including a single case of the rare HDR and EDR strains), malaria, tetanus, pneumonia, scabies, diphtheria, conditions associated with poor diets (Marasmus and Kwashiorkor) toxoplasmosis, meningococcal Meningitis, tropical splenomegaly and enteric pathogens.

In the Children’s Wards (on our pediatrics schedule) we were able to observe the management of children’s' diseases, most notably cases of hydrocephaly in neonates, leukemia (which is becoming rampant in Kenya), cerebral palsy. We were also able to observe and participate in simple elective surgeries, notably hysterectomies and adenoidectomies. Ward rounds were held regularly (most days) on the medical wards and were largely offered by local and staff and residents.

About the best thing regarding our elective program was the opportunity to go into field research stations and witness firsthand the real challenges of community health work relevant to the specific electives we had each been scheduled to undertake. Understanding some community health challenges through interaction with field doctors and the local communities gave us deep insight into some of the clinical experiences we had encountered at the hospitals. We were also able to attend several CME lectures and forums at both hospitals and to network with local doctors. In Kisumu we were able to also visit the KEMRI/CDC centers to observe clinical trials on ongoing research into malaria treatments. The staff at the ITROMID took us into their field research station where we observed several cases of leprosy (at a colony of lepers) and leishmaniasis at Kenya's coastal region of Kilifi.

Cross-Cultural Talk

Through our interactions at the hospitals, we also learnt quite a bit about how education, culture and socialization interact with the field of medicine. For instance, while it has been proven through scientific research that circumcision of the male organ may has some correlation to reduced rates of HIV/AIDS infections in men, some communities in the country which hold the practice in contempt still resist the "cut" for cultural reasons. In some communities, unregulated herbalism and witchcraft have a strong bearing on the perception, practice and/or use of contemporary medicine. Sometimes prescribed treatments are deemed by patients to be sub-optimal or ineffective even before they have been attempted largely due to cultural beliefs and the level of awareness and education of the patients. While the clinical environments at both Kenyatta and New Nyanza were generally welcoming of the input from foreign medical students and encouraged discourse with visiting students, in our interactions with patients and staff, in particular the nursing staff, it was at times a challenge balancing ethnocentricity, clinical judgment, sense of authority and commitment to the well-being of the patient especially on points of difference in patient management. The frustrations that often resulted from a lack of adequate resources was, on occasion, overwhelming.

Kenya received us warmly. Because we traveled as group (we were initially seven but two dropped out), we had opted for housing that would allow operate as independently as possible. Our homestay in Nairobi came about more as an afterthought on our part but was quickly organized and was perhaps our best cultural experience. Obviously, we planned several cultural tours; one to a Maasai village in a town called Kajiado and another, on a trip to Mombasa, to a Kaya, in a village in another part of Kenya called Kwale. We were able to learn at least some bits of the Kiswahili language sufficient to have at least a basic conversation with staff and patients at the hospitals. This was particularly necessary for our stay in Kisumu.

The Ups and Downs

There were obviously several real rewards of our elective experience in Kenya. The opportunity to see and get hands-on-involvement in a variety of cases that would otherwise be merely theoretical cannot be overstated. But perhaps the most instructive reward of our elective

experience was really being able to see the interactions between clinical and community health giving us some real insight into the needs that are critical to the success of any clinician.

The different elements of our elective were exceptionally well organized through our program organizer's Odyssey Africa. Our main contact, Freida, was very helpful and readily available to address our concerns regarding our academic experience, accommodation, safety, services and in-country support. Freida facilitated sufficient contact via email and was on hand to meet us in Nairobi on our arrival. We were particularly impressed with the additional effort to ensure that we were well taken care of. Our rotation schedules were very flexible and we were well-accommodated when the need to amend schedules became necessary. She also undertook to ensure our clearances with medical education authorities in the country and that we were duly registered with our local embassy in Nairobi.

Language barriers, although present, were surmountable since the staff and doctors communicate superbly in English. Many patients however spoke only little English. Except for the intermittent power outages, the living conditions in both Nairobi and Kisumu were for the most part were safe and comfortable. In Nairobi, we were live-in guests of a host family that comprised two brothers and a sister who shared a large house and run a guest-inn at their home. It was a walking distance to and from the Kenyatta Hospital and since we could easily also commute to the hospital in five-minutes; it was fairly inexpensive to use a cab when the need arose. In Kisumu, we lived at a highly secure guest house on self-catering basis. It was much further from the hospital than our previous accommodations had been. Nonetheless, the adventure of riding the tuk-tuk every morning to the hospital was not to be passed up. For a quicker trip we would bike on the rickety boda-bodas but these were rather unsafe so it was not a daily affair. We were particularly comfortable here, away from the hustle and bustle of the more urbane Nairobi. The combination of working in a new environment, encountering a new culture and adjusting to new living conditions was challenging. In our experience, an elective in Africa is one to be approached with good planning and without lofty expectations. An open heart is a prerequisite to simply learn from a new culture and to appreciate a new lifestyle. The people were warm and friendly and the experience was one we all mutually agree was exceptional and invaluable for our medical education.

Our African Adventure

Kenya has much to offer anyone looking for a varied travel experience. We largely sampled the adventure expeditions and stayed in budget accommodations in the course of the travel that we managed to do. At the end of our stay, Freida tagged along on a ten-day tour that she organized for us. In between camping, whitewater rafting, game drives, rock-climbing, mountain treks through the Rift-Valley and boiling eggs at a hot-water spring on Lake Baringo, we had simply the best time ever. We were also able to visit the effervescent Zanzibar and make a brief foray into Jinja, Uganda.