

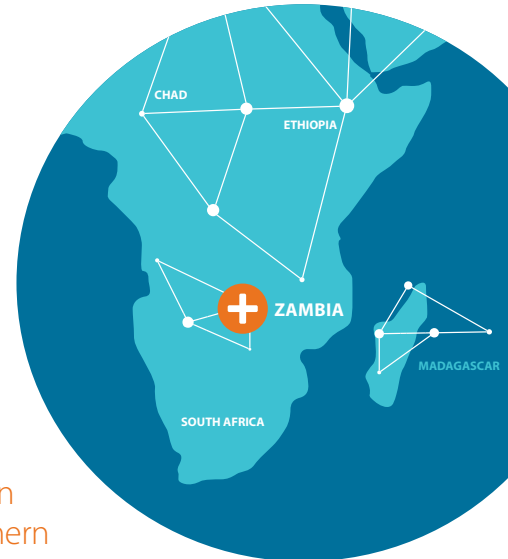
# Elective Grant Report



*Midwife Chola and I after a successful day on the labour ward*

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No matter how much you read, study or watch – nothing will prepare you for when you live it. For the month of February 2019, I had the great privilege of immersing myself in Livingstone Central Hospital in Zambia's Southern Province. Here, I was exposed to an entirely different side of medicine and the immense optimism of a community.

Before leaving for Zambia, I had learned a number of things. For example; Zambia is located in Southern Africa, with a population of just over 18 million. With a GDP of \$162 billion USD they punch above their weight in healthcare spending, addressing common issues such as HIV, childhood illness and maternal mortality. What I didn't learn, was how welcoming the locals were, how passionate the doctors were and how much I would grow personally and professionally.

Livingstone is the tourist capital of Zambia, boasting its location on the edge of the mighty Victoria Falls – indigenously called Mosi-oa-Tunya or "Smoke That Thunders". The incredible community is dynamic, encompassing up to 45 local ethnic groups, and luckily for me everyone spoke fantastic English, making it just that little easier to order a N'Shima (the local staple) or direct a taxi around town.

Livingstone Central Hospital is the largest hospital in the South, serving over 800,000 people, with 400 beds. The hospital has a range of specialties providing high level tertiary care in medicine, surgery and obstetrics. As part of my elective I spent two weeks with the Obstetrics and Gynecology department and two weeks in Paediatrics, while maintaining a focus on HIV management from preconception, prenatal, and all the way through to adolescence.

The hospital is tucked within its own complex, far from any prying tourists. A long driveway meanders between flowering red Poinciana trees, offering welcome shade from the blistering summer heat. On my first day, I was embraced by the Chief Medical Superintendent of the hospital, almost as excited to see us, as we were to be there. With two other students from the University of Sydney and two from the University of Leicester we embarked on a tour of our home for the next month. We began in the main hospital, an old brick building with a sombre history. Up until recently, the colonial Zambia, known as Northern Rhodesia, had decreed that the hospital was for whites only, relegating the healthcare of black Zambians to peripheral sites, or worse yet, nothing at all. Fortunately, even with a colonial hangover, the hospital grounds are flourishing, offering safe access to all.

Surgery, casualty, obstetrics and even a VIP suite (for those patients who could afford the \$12 AUD extra fee) now inhabit the main section. On our tour, we made careful note of which departments had air conditioning (unfortunately none of the wards I was on) and continued along the thoroughfare passing between separate halls which house everything from internal medicine to psychiatry. From then, we were thrust onto the wards, ready to soak up as much as we could.

Even from the first week, it was clear to see that the Zambian approach to healthcare was different to what I've experienced in Australia. There were a number of subtle trivial differences, like the fact that everyone wore white coats, the doctors would drink the local fermented maize beverage called monkoyo instead of coffee and that the hospital food actually looked half-decent. Yet, the starkest and most impactful difference was the lack of resources.

*The hospital was often at breaking point, when all the beds were full and women were lying on the floor waiting to deliver their babies. Medications and equipment were often unavailable. This affected the doctors' practice, where their approach was heavily influenced by the chronic lack of resources within the hospital.*





Outside the main building of  
Livingstone Central Hospital



Dr Kapoba and the  
obstetrics team preparing  
for an emergency caesarean



180 degrees on  
the lower Zambezi



Rainbow over the majestic  
Victoria Falls

If one thing was clear, it was how important first principles are. Within the Zambian healthcare system, the cost of the consultation, most medications and some tests are free. However, other investigations, including all imaging (x-ray, ultrasound, CT scan), blood tests (full blood counts, electrolytes) and ECGs are a direct cost to the patient. Sometimes, ordering that \$1.20 AUD chest x-ray (10 Zambian Kwacha) was simply too much for the patient to afford. Therefore, their assessment relied on their first principles – look, feel, move.

*It was difficult to face the reality of overwhelming health inequality that can exist across the globe. This was highlighted to me in the neonatal intensive care unit, where we were actively resuscitating a newborn but tragically couldn't continue the resuscitation as the department no longer had a functioning ventilator.*

I want to reassure you, it wasn't just doom and gloom! What made the elective so special were the people I met. From the cleaning staff who greeted me with a smile, to the Head of Paediatrics, who would ring on a Saturday, just to see how my weekend was. There were so many people who I met and learned from, yet one person stands out above all. This person was my supervisor, the indefatigable Dr Robert Fubisha. Dr Fubisha is the powerhouse behind the Paediatric Centre of Excellence, a state of the art multidisciplinary clinic that specialises in the care of children living with HIV. When I was in the Centre we did everything from feeding the patients porridge for breakfast, providing them with textbooks for school, reviewing their nutrition, monitoring their adherence and we dispensed their medication entirely for free. The clinic's fully electronic medical record system is the first of its kind in Zambia, where patient check-in, consultation notes and medication charts are all included on a small card carried by the patient.

Since starting in 2005 with less than 30 patients on antiretroviral medication, the clinic now has 750 patients, with some (now) young adults having gone from patient to doctor. With the most crucial aspect of HIV therapy keeping the children adherent, this was a major priority. Dr Fubisha's revolutionary approach to this common issue is leading the care of paediatric HIV. We did this by maximising their nutrition, growth and education to help combat HIV.

*Being able to partake in education, dispelling myths and encouraging children to take their medication was a really important part of my experience in Zambia and an experience that I will always cherish. For me, it highlighted how big problems often require small solutions – sometimes to defeat HIV, all it takes is a hot breakfast.*

There were so many wonderful clinical experiences that I feel helped me develop personally and professionally. What I treasured was being immersed in obstetrics and paediatrics. Within obstetrics, I attended antenatal clinic, working with doctors as they monitored HIV positive women's progress, trying to break the cycle of transmission. I really enjoyed the continuity of care – watching the neonates of HIV positive mothers be born, then seeing similar babies thriving when coming in for checkups years later.

One of the other highlights was my time on the labour ward. Being able to deliver babies was one of the most incredible experiences of my life. Working side-by-side with the midwives, I had the opportunity to welcome new life into the world. Whether it was one woman who gave birth to her eighth baby (she definitely taught me a thing or two) or the 17 year old girl who just needed reassurance everything would be okay, every moment was special and unique.

Working within the scope of resources available combatting diseases such as tuberculosis (TB), diarrheal illness and malaria, and using improvisation in obstetric complications like post-partum hemorrhage, helped grow my clinical confidence using first principles. Moreover, these experiences were of immense personal growth, with my time in Zambia having expanded my understanding of healthcare and reinforcing how lucky we are in Australia. When I caught myself in the midst of a complex ward round discussing children with severe malnutrition, TB and HIV – it made me stop and realise that not only are we privileged to live in a society with incredible healthcare, but to have such extensive primary prevention, ensuring very few patients reach such an advanced stage.

Outside of the hospital, Livingstone kept me enthralled in its astounding natural beauty and heart pumping adventure activities. Victoria Falls was an absolute highlight. Rightfully crowned a 'Wonder of the World', it is breathtaking to stand and watch 550 million litres of water a minute cascade over the 1.7km of stone. Victoria Falls is the junction between the Upper and Lower Zambezi – home to fish, crocodiles, hippos and a range of adrenaline filled fun that I was sure to tell mum about AFTER I'd done them.

*One morning, I was tempting fate on the edge of Victoria Falls in the notorious Angel's Pool. The next day I was hurtling down rapids in a tiny rubber dinghy.*

Going into this elective, I was sure to maintain realistic expectations of my role in the hospital. For me, it wasn't about the heroics of saving people by extracting their gallbladder in one fell swoop or revolutionising the delivery of HIV care. For me, it was the simple things. I was able to help the same way I could in Australia, by taking bloods, gaining IV access, writing notes, suturing minor wounds, clerking patients and as explored before, by helping with the education of children with HIV. Sometimes, it was as simple as being there. Passing through the surgical ward to meet a friend for lunch, I quickly found myself involved in a complex trauma case, requiring all sets of hands they could find!





The main area of the Paediatric Centre of Excellence



The play and education room in the Paediatric Centre of Excellence, with books procured by the donation from MIGA



Baby safely wrapped up in a million layers after a successful birth



Two colleagues and I in front of the hospital's ambulance

Despite the incredible work being done in the Paediatric Centre of Excellence, the department is terribly under resourced. Ad hoc and patchy funding helps sustain the Centre's holistic approach to HIV management. With the generous Elective Grant funding from MIGA, Dr Fubisha and the team were able to work on projects previously neglected. Below is an email from Dr Fubisha which outlines how the money was spent and highlights the immense difference every dollar can make:

"We would like to thank you and the donors for making the wonderful donation to our Paediatric Centre of Excellence which looks after HIV infected children who are often double orphans. The donation was used to procure books for these children ranging from story books to school curriculum recommended books to add to our already existing collection. We are confident that this generous gift will go a long way in brightening their horizons as adults."

*For me, this elective to Zambia was not just about flying in and flying out; this elective has been the catalyst for something bigger. It was about being part of a vibrant dynamic community. It was about learning from some of the most genuine, passionate doctors I've met. It was about realising the dream, that no matter where we live in the world, we can all receive the same level of care. With thanks to the support of MIGA, my four week elective at Livingstone Central Hospital was a transformative experience. The challenge is firmly ahead, the outlook is positive but the work is only beginning.*

**Each year MIGA's Elective Grants Program offers 10 Grants of \$3,000 to medical students undertaking electives in developing communities. Each Grant includes \$1,500 to cover the student's personal elective costs and \$1,500 to provide medicine or other aid to the local community. To be inspired by other past recipients and find out more about applying, visit our website.**

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