Mr Sydney Mulamfu - Radiology manager, Livingstone Central hospital and coordinator of the Imaging Services in Southern Province, Zambia Ms Brigitte Kaviani - Assistant Operations Director - Sheffield Teaching Hospitals, UK

As a follow on from our article in the August 2017 issue of ISRRT journal we would like to give an update on our collaborative work in Southern Province of Zambia. Brigitte travelled to Livingstone in August / September and again in November.

At the end of August we met up again and spent two weeks in Livingstone as well as touring the Southern Province visiting a total of nine Radiology departments.

In the Radiology department of Livingstone Central hospital Brigitte met the radiographers again. The department employs approximately 19 Radiographers. It is the largest hospital in Southern Zambia. The department has one general radiography room, several ultrasound machines, a 32 slice CT scanner, a mammography unit and a fluoroscopy unit (not currently working during visit). The department is soon to receive its first digital unit and in the next two years mostly likely to have an MRI scanner installed.

During the first week the staff were able to share information about their challenges and give an update since Brigitte's last visit in March 2017. Over 300 books had been received donated by radiographers from Sheffield in the UK. The first radiology library had been set up under the management of one radiographer, Melannie Lisimba. Although there had been many challenges in getting all these books from the UK to Livingstone we never gave up hope that they would be received.

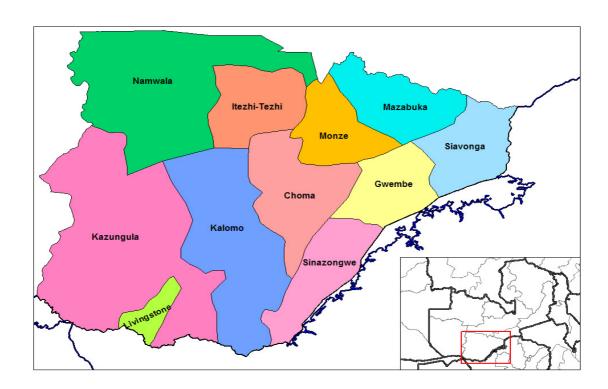
On this occasion a further 120 anatomical markers were delivered to add to the 30 received back in March 2017. Radiographers described the markers as gold and books as diamonds. These have made a huge difference.

During this visit 8 radiographers received CPR and basic first aid training delivered by Brigitte as well as 6 nurses who will deliver training to others. Unlike in the UK where this is an annual training program, this training is only delivered in the first year of the radiography course in Zambia.



During the first week a shipment organised by Brigitte arrived in Livingstone. This comprised of ten neonate and several adult resus manikins and airway bags and masks. This concluded the equipping of a clinical skills unit at Livingstone Central Hospital.

During the second week we started a 510 km journey from Livingstone to Siavonga visiting nine Radiology departments. These included Zimba, Namwianga, Kalomo, Choma, Gwembe, Monze, Mazabuka and Siavonga. We arrived unannounced and met an amazing group of radiographers. The departments varied from having wet developing, processors in darkrooms to Digital Radiography. An amazing contrast. The common thing between all of them was the lack of staff, lack of training material e.g. textbooks.



The radiographers we met were very happy and positive believing that change would come at some point. We delivered textbooks, anatomical markers and pens as gifts with the promise that Sydney would follow on with their requests.

Gwembe and Monze stood out in particular. Gwembe for receiving funds to redesign and decorate the department. Monze for having digital equipment sponsored by Japan. Training material lacked everywhere. We returned to Livingstone and established a list of needs for everyone.

In November 2017 Brigitte will be returning with a senior radiographer, Mr David Smith and Senior Physiotherapist Craig Wilson, who will deliver a program of training tutorials for the radiographers, Physiotherapists and OTs in Livingstone. Brigitte and David aim to provide every hospital in region with training material on USB sticks. It is imperative that radiographers in Zambia are given the opportunity to be educated further. There is certainly the thirst and the will for this by every radiographer we met.

Brigitte agreed to sponsor the decorating of two rooms in the Radiology department at Livingstone Central Hospital in September 2017. Setting up a new regime of damp dusting and teaching radiographers to cannulate. We need to encourage radiographers to read more and hoping that a journal club is set by January 2018.

Although we are only into our 6 months of collaboration we feel we have already come a long way in 2017 of making some fundamental changes to the vision and hope of our radiographers in the Southern region of Zambia.

We hope that in the near future some Zambian radiographers would be sponsored to come to the UK to shadow our staff at Sheffield Teaching hospitals and take the knowledge back to Zambia.





Radiographer Elina

Zimba Missionary Hospital was founded in 1960 and is 50km from Livingstone. It is notable a large market town. The hospital covers over 75,000 population. The Radiology department employs three radiographers and comprises of a general room and two Ultrasound machines.





Namwianga Zonal Health Centre The hospital provides a wide range of services to the community The Radiology department has one Radiographer who is trained in Ultrasound. There is one general room as well as one Ultrasound machine



Sydney Mulamfy (on left) with Radiographer Michelo (Right)

Kalomo District Hospital caters for a population of 258,000 people and located in the small town of Kalomo, 126 km from Livingstone. There are four Radiographers and the department has one general radiography room as well as one ultrasound machine.



Radiology manager Mr Sydney Mulamfu and radiographers at Kalomo Radiology Department



Choma General Hospital

Choma General Hospital is a 200-bed district hospital. It provides health care for the 30,000 people living in Choma district and serves as a referral centre for the 380,000 people living in HII Choma town is a small friendly town approximately 188 km from Livingstone. There are many shops, markets, banks, supermarkets as well as an interesting museum. The Radiology department tin Choma General Hospital employs four Radiographers and the department has two general radiography machines (one not opened as yet) as well as two ultrasound machines.



Hospital



Brigitte Kaviani outside Radiology



Sydney Mulamfu and radiographer in department receiving markers and book

Gwembe District Hospital

Gwembe is a small town in Southern Province of Zambia with a population of about 2000 people.

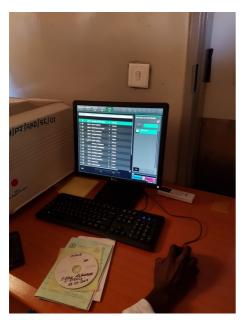




Monze Mission Hospital has an impressive Radiology department. The department employs a total of 11 Radiographers. One of their general rooms was digital installed from sponsorship from Japan. The department has a further general room and two ultrasound machines









Mazabuka General Hospital is located in the town of Mazabuka. The hospital services a population of 274,495. The Radiology manager Cuthbert Mulenga manages the Radiology department which employs several Radiographers. The department is in need of re-designing and modernising.









Sydney with Cuthbert Mulenga

Siavonga District Hospital is located in a beautiful location and in the town of Siavonga which overlooks Lake Kariba. The Radiology department run by Gertrude employs a total of four Radiograhers. There is a general radiography room and an Ultrasound machine.





November 2017

In November Brigitte travelled back to Livingstone this time with Mr David Smith, Practice Educator and Senior Radiographer and Mr Craig Wilson, Senior Physiotherapist both from Sheffield. They delivered a program of tutorials to the radiographers, physiotherapists and OTs at Livingstone Central Hospital. David delivered 8 tutorials on Chest technique and interpretation; Upper Limb technique and interpretation; Lower Limb technique and interpretation and CT Head technique and interpretation. All the tutorial materials were provided on USB sticks to be distributed to the regional hospitals visited in September.

Further First Aid and CPR sessions were delivered to many radiographers. A programme of venepuncture training for radiographers was set up and delivered (Training guide and textbook were provided) and CV workshop weredelivered for radiographers and physiotherapists

We were able to take with us more anatomical markers; anatomical posters for Livingstone and regional hospitals; more Radiography textbooks; Training aids e.g. skeleton. We donated a laptop and projector to the Radiology department and provided them with hundreds of pens.

During the two weeks period the team of three also travelled to Mukuni village and delivered basic first aid and CPR to over 120 students, teachers and adults.

Although we are only into our 6 months of collaboration we feel we have already come a long way in 2017 of making some fundamental changes to the vision and hope of our radiographers in the Southern region of Zambia. We hope that in the near future some Zambian radiographers would be sponsored to come to the UK to shadow our staff at Sheffield Teaching hospitals and take the knowledge back to Zambia.



One of 4 rooms in Radiology decorated and posters displayed on walls



tutorial delivered by David Smith





Basic first aid and CPR delivered at Mukuni Village school

Our thanks go to:

- 1. All Zambian radiographers we have spoken to and met in the Southern province of Zambia who shared with us their joys of working as radiographers as well as their challenges.
- 2. The brilliant team of Radiography managers and radiographers at Livingstone Central Hospital who made us smile and laugh at our evenings out in town especially Mr Bruce Muleya, Mr MisheckSinkala, Mrs Victoria Kanyoze and Mr Justin Mumbi
- 3. To all radiographers in the UK who donated books and Anatomical markers
- 4. To Susan Marchant, General Manager of World Radiography Educational Trust Foundation (WRETF) for facilitating the twinning programme between Sheffield Teaching Hospitals and Livingstone Central Hospital and all hospitals in the Southern Province of Zambia.
- 5. To Emily Slater at myxraymarkers who donated anatomical markers info@myxraymarkers.co.uk
- 6. To Frank Bigley owner of Mail Boxes etc (Sheffield) who assisted and facilitated the delivery of many parcels to Zambia safely <u>info@mbesheffield.co.uk</u>
- 7. To Andy Creede who donated markers and who circulates our article in idcsig@yahoo.co.uk (IDC-SIG)Imaging in Developing Countries Special Interest Group
- 8. To Brigitte's small team of staff back in Sheffield Teaching Hospitals Legion Care Group training hub who listened to her passionate stories of her trips to Zambia endlessly. Thank you Nicole, David, Nikki, Steve and Louise

If you have any suggestions or donations please contact Mr Sydney Mulamfu on smulamfu61@gmail.com and Ms Brigitte Kaviani on Brigitte.Kaviani@sth.nhs.uk