

Mozambique Visit Report, March 3-12, 2014

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1. Introduction

The Hospital Central de Maputo is the teaching hospital for the Faculdade de Medicina at the Universidade Eduardo Mondlane (UEM). Established in 1963, it is the oldest and largest university in Mozambique with its campus located in Maputo. The School of Medicine is Mozambique's main medical school, and serves as the major site in Mozambique for training physicians through medical school and post-graduate education.

More details

- The Hospital Central de Maputo is a very large campus, with multiple buildings, separated by gardened areas. It has a 350 bed Pediatric hospital and busy neonatal nursery with around 600 high-risk deliveries per month.
- Radiology building located at some distance from the Pediatric facility. Pediatrics has a portable x-ray unit.

Observations

- Both Radiology and Pediatric physicians strive for the best results possible in a resource-limited environment. Securing optimal use of these limited resources is an ongoing preoccupation.

2. Assessment of different areas

A. Pediatrics

I found it to be a very welcoming community, with immense challenges to overcome.

Resources:

- ⇒ Currently, there are a total of about 50 Pediatricians in Mozambique, which has a population of over 14 million children. The Department of Pediatrics of the Hospital Central de Maputo has 12 Pediatricians and 30 pediatric residents. Residents rotate through all the wards - PICU, nursery, infant ward, respiratory illnesses, ID, general ward, and emergency room.

Lectures

- ⇒ The lectures aimed to convey the basics of imaging interpretation so that pediatric clinicians could work more independently given the geographic and other barriers impeding ready

interaction with radiology. But the radiology residents were warmly encouraged to attend the lectures and participated on rounds with pediatricians - which was a first for them – to good effect. Duplicating this approach a regular, weekly basis could prove highly beneficial to all.

⇒ Topics:

- Basic concepts of chest imaging
- Pediatric GI emergencies by US
- Neonatal Head US
- Neonatal respiratory distress
- Neonatal acute abdomen
- Image Gently: radiation protection and safety in children
- WFPI
- Case review with radiology residents (2 h session)

⇒ The lectures were well attended, both by pediatricians and radiologists; 75 participants on the first day. At the end of the week, approximately 60 diplomas of participation were signed.

Rounds

⇒ Daily rounds were performed with pediatricians in different floors, most time spent in Pulmonary Medicine, reviewing cases.

⇒ After reviewing a normal chest radiograph and a CT of chest, we worked through a long list of difficult pediatric cases. The majority were cases of necrotizing pneumonia in children HIV+ TB. After seeing back-to-back cases of the same pathology presenting in different ways, the clinicians seemed more comfortable making the diagnosis on plain films.

⇒ Major issues are:

- The time it takes to schedule a cross-sectional imaging study for very sick children.
- Inter-departmental interaction and training needs

Rotations with UCLA

The call for rotation opportunities at UCLA for further training in chest imaging was initiated by pediatrician Dr. Sandra Mavale. Dr. Josina Chalupo will come in June/July 2014. My visit opened broader dialogue with Drs. Mavale and Paula Santos, Chief of Pediatrics, on radiology exchanges and nurturing inter-departmental interaction in this regard.

B. Radiology

Equipment & resources

⇒ Resources:

- 1.5 T MR, by Siemens
- 1 single acquisition CT, by Siemens
- 2 US machines by Siemens, unfortunately not fully equipped.

- A few general plain film units are available, at least one new one. No CR devices or PACS (which would allow transmission of images to distant buildings, but has a costly infrastructure)
- No fluoroscopy devices (cost constraints) so no contrast studies available

3. General Comments

We participated in a teleconference with UCLA, which was a great experience for all involved. Our residents greatly enjoy the experience of working in Mozambique.

On my last day, I met with Drs. Paula Santos and Emily Hartford to discuss the experience and channel my observations into recommendations. Both are doing a remarkable job and remain undaunted by the challenges entailed.

It was an extraordinary journey, during which I learned much from those I was there to teach. I look forward to continued and increased interaction with them and the UCLA's CWH. I am grateful for this opportunity provided to me.

5. Pictures



Fig 1 – First day of lectures



Fig.2 – Case review session with Pulmonary Medicine



Fig. 3 – Teleconference with UCLA – Morning Report



Fig. 4 – Final lecture



Fig 5. Arts and Crafts Market



Fig 6 – Ines and Emily at FEIMA restaurant



Fig 7 – Peds ER entrance



Fig. 8 – Main Pediatric Hospital