

Report of Visit to Hawassa, Ethiopia: 19th to 28th March 2010

I boarded the flight from Heathrow with colleagues from London and Gwent on 19th March 2010 with mixed feelings. After a long flight, we arrived at Addis Ababa to be met and welcomed by Dr Aberra and his daughter. From the airport we drove to Hawassa. It was a long journey to Hawassa and we stopped off en route for a welcome break to stretch our legs and fill our stomachs. We arrived at the Haroni International Hotel in the evening.

The Need

Ethiopia is located in the “Horn of Africa” and has a total area of about 1.1 million square kilometres. With a population of more than 81 million, it is one of the most populous countries in sub-Saharan Africa; more than 85% of the people live in rural areas. Life expectancy in Ethiopia is low, **55 years for men and 58 for women** and key health statistics are as follows:

- The under five mortality rate is 123/1,000 live births
- 673 per 100,000 women die in childbirth
- Only 181 hospitals and 2000 doctors in the country
- 1.4% of people aged 15-49 are living with HIV/AIDS
- an estimated per capita income of \$ 130
- Doctor to population ratio 1: 118,000
- There are 160 Surgeon and therefore surgeon to population ratio 1: 500,000

The health care system

Ethiopia's health care system is among the least developed in Sub-Saharan Africa and is not, at present, able to effectively cope with the significant health problems facing the country.

The present government has recognised that ill health of a fast growing population and has committed to salvaging the country's failing health system. The government has chosen to strengthen primary health care as a strategic approach to address a major gap in the country's health care system: lack of physical access to even basic health care facilities in rural areas.

Widespread poverty, poor nutritional status, low education levels and poor access to health services have contributed to the high burden of ill health in the country. Malaria is the primary health problem in the country; it is the leading cause of outpatient visits and is responsible for 8 to 10 million annual clinical cases and a significant number of deaths. In total, as much 80 percent of the health problems in the country are due to preventable communicable and nutritional diseases; these health problems are associated with low socio-economic development.

Brief overview of the medical curriculum in Ethiopia: All Ethiopian high school students will sit a national exam and depending on their scores will be placed in their choice of educational pursuit (i.e. Medicine, Law, Engineering – this order is typically the most competitive career choices). There are currently 23 sites of higher education in Ethiopia. Education is paid for by the government for the most part. It is only recently that students may be charged a minimal fee. Assignments to medical schools are made by the government and until recently would be what would seem to be random. This has changed to put students closer to their home so that housing would not have to be an additional burden paid for by the government. Recently private institutions in Medicine have opened up; one being in Addis Ababa. English is the language of the medical curriculum in Ethiopia.

The three prestigious medical schools (Addis Ababa, Gondar, Jimma) were established in 1964, 1978 and 1984, respectively. The faculty of Medicine was established in Hawassa in 2003. It grants medical Doctors diploma (5-year course), Masters in Emergency Surgery (3-year course) and a 4-year course for health officers.

Hawassa is a very pleasant lakeside town. It is about 275 km from Addis Ababa on a good tarmac road (about 5 hours drive).

Hawassa Referral Hospital – this government hospital serves the population of Hawassa and extends to include surrounding areas encompassing roughly 17 million people. This hospital was started in 2003 and is attached to Hawassa University. There are 400 beds but currently 250 are in use. Of these 58 are surgical beds and usually 10 -12 urology cases are on the ward. Medical staff included general surgeons (3), obstetrician and gynaecologists (4), Physicians (4) Paediatricians (3) and Anaesthetist nurse practitioners (2).

Objectives

- To assess infrastructure (theatre, equipments & staff) and the need for introduction of endoscopic urological procedures.
- To acquire knowledge of the locality, the state of healthcare and the needs of the people.
- To deliver two lectures to final year medical students
- To visit Wondogenet Health Centre

Current situation

- Very limited urological services in Hawassa and patients are referred to Addis for endoscopic procedures, lithotripsy and complex surgery.
- No endoscopic urological procedures performed at the hospital.
- 1 general surgeon has had limited urology training in India.
- Storz equipments
 - Cystoscope (22F)
 - Optical urethrotome (21F)
 - Resectoscope (26F), Monopolar
 - 30° telescope
 - Light source
 - Diathermy machine
- Flexible Cystoscope (Pentax)

The visit to theatres

On Monday (22nd March 2010) I went to theatre with Dr Aberra. There were 2 cases on the list for transvesical prostatectomy. I observed the first case and assisted with the second one. There are 3 operating theatres. In the short time, I have observed their practice in theatres, helped to raise their confidence in methods they were using. I was immensely impressed by their knowledge and skills. The theatre register showed nearly 600+ surgical operations since September 2009. I also visited the medical equipment store twice. On my first visit I noticed a lot of endoscopic (flexible Cystoscope, gastroscope, colonoscope and bronchoscope from different manufacturers) and laparoscopic kits in stock. Mr Paul Gartell, Colorectal Surgeon kindly agreed to accompany me on the next visit and we managed to select some endoscopic equipment for use. On my final day I spent 4 hours with the theatre sister setting up a cystoscope (rigid and flexible) for immediate use.



Operating theatre



Dr Aberra performing a transvesical prostatectomy

The problems they are facing are that of lack of guidance and supervision of their work. There is a poor supply of consumable and disposable items. In addition

- Lack of diathermy machine and leg-support for endoscopic urological procedures.
- Lack of generator (I observed frequent power cuts).
- Suboptimal pre and intraoperative preparation
- Equipment sterilisation techniques need further improvement.
- No facilities to wash and sterilise endoscopic equipments.
- No glycine and wide bore irrigation sets.
- No maintenance engineer for medical equipments.
- Lack of HDU and ITU
- No camera stack

Visits to out-patient and ward

On Tuesday (23rd March 2010) I attended the urology outpatient clinic along with Dr Aberra. We saw patients with urethral stricture (2), urinary retention (2), Kidney stones (2), and a young girl with retention (1). Two medical students also attended the clinic and an intern was helping Dr Aberra. I did some teaching in an outpatient setting. Dr Aberra showed me the record of monthly activities in the surgical outpatient. A summary is tabled



Dr Aberra

Emergency, SOPD

- Total cases seen = 215
- Sex
 - female- 60 (26.2%)
 - male- 157(73.2%)
 - missed- 1(.5%)
- Address
 - Hawassa- 80 (37.2%)
 - Shashemene- 20(9.3%)
 - w/genet- 10 (4.6%)
 - others-105(48.8) awassa zuria, Assasa, Dodola

Cont'd

- ✓ Common Presentations
- Trauma=157(73%)
 - STI- 61(39%)
 - Head injury- 19(12.1%)
 - Fracture & dislocation – 56(35.7%)
 - others_21(13.4%)
- Acute abdomen= 34(15.8%)
 - Acute Appendicitis- 13(38.2%)
 - Obstruction- 14(41.4%)
 - Others (peritonitis, A.cholecystitis)-7(20%)
- AUR= 8(3.7%)
- Missing= 1
- Others- epididymoorchitis, burn, perianal abscess,

REGULAR OPD

- Total cases seen=274
- Sex
 - female= 107(39.1%)
 - male= 167(60.9%)
- Address
 - Hawassa= 111(40.5%)
 - Out side Hawassa= 129(47.1%)
 - missed =34(12.4%)

Cont'd

- Common presentations
 - Trauma= 40(14.5%)
 - soft tissue tumors=36(13.1%)
 - thyroid disorders= 30(10.9%)
 - BOO = 28(10.2%)
 - breast pathology= 18(6.6%)
 - hemorrhoids, esophageal pathology= 9(3.3%)
 - scrotal mass, hernia =7(2.6%)
 - soft tissue infection, renal stone= 5(1.8%)
 - Others = 80

Common urological problems encountered are urinary retention secondary to BPE, urethral stricture, renal and ureteric stones. Unsuccessful catheterisation is treated by an open suprapubic cystostomy. I was told by Dr Aberra that average hospital stay after transvesical prostatectomy is 15-17 days.

Radiology support is basic (plain x-rays and USS) and for an IVU, urethrogram or CT the patient has to go to private hospitals. Laboratory facilities have improved in the last few years with support from the Gwent LINK and urine microscopy and cultures are done routinely.

Medical students (5th Year) teaching

I had selected two topics that I thought would be important to them.

- General overview of urinary retention and management of patients with obstructive uropathy.
- Lower urinary tract symptoms – assessment and management.

The students were very attentive and keen to learn. They presented a case with urinary retention. I did suggest they critique their own presentations. They have in the end overcome their natural shyness and displayed great knowledge and capacity to learn. Generally I would have preferred to have more time for questions and to talk to them.

Wondogenet & Addis Sights

We travelled to Wondogenet on Friday (26th March). On Saturday (27th March), I visited the Health Centre along with Gwent LINK members. We were shown clinics, wards, operating and training rooms. I also saw a motor ambulance donated by the Gwent LINK. It was very obvious that LINK members have put in lots of effort and, more importantly, local health workers have maintained the standard. I was very impressed by commitment and enthusiasm of Mr Biku Ghosh from Gwent LINK. Interestingly local staff performed the famous coffee making ceremony for us. We reached Addis at nearly 4.30 pm and visited the National Museum and saw 'Lucy' or rather her bones! She was a female hominid who lived in the northern region of Ethiopia 3.2 million years ago. We had dinner with Mr Gordon William before heading back to the airport.



It was the perfect end to a fabulous experience and Ethiopia, a country I shall never forget and whose people are among the friendliest and kindest I have ever met.

Conclusion and Future Directions

During this visit I discussed with Dr Aberra, Dr Belayhun (Head of Hawassa College), Dr Yifru (Dean of Medical Faculty), Dr Sheleme (Vice President for Academic and Research) Hawassa University and Mr Seyoum Head of International Office, Hawassa University about the future direction of healthcare and priorities around the region. Mr R H S Lane (Honorary Consultant Colorectal Surgeon) and Mr Paul Gartell (Consultant Colorectal Surgeon) were also present at the meeting with the Dean and the Vice President. From our discussion it was apparent that management of trauma is a clinical priority. This was further supported by their audit of workload. It was felt that development of a trauma centre would require improvement in radiology, pathology, operating theatre, appointment of specialist surgeons and a significant amount of investment. In contrast introduction of endoscopic urology would be possible with some efforts. In addition endoscopic techniques in urology would minimise hospital stay, reduce morbidity, quicker return to work etc.

I think UROLINK should support urology service development for this only teaching and referral hospital for 17 million people. Why urology? As there is no other even partially trained urologist for SNNPR region which has 20 other district level hospitals. At present all common urological operations are performed with an open approach and endoscopic procedures are not done at all. Advantages of minimally invasive approach to patients are well documented. Furthermore Dr Aberra with his team has shown outstanding leadership and effective commitment to Hawassa Hospital.

Introduction of endoscopic urology

Suggestions

Short-term

- One or two members from theatre should be nominated for training in sterilisation and maintenance of endoscopic equipments.
- The staff should receive basic training for the theatre equipment maintenance
- To strengthen the practical skills and knowledge of ward nurses
- To nominate lead clinician for urology
- A system should be in place for cascading training and regular updates among the staff
- Regular training for surgeons.
- Start urology endoscopic procedure with diagnostic cystoscopy
- To organise the local supply of irrigation fluid and sets
- To arrange an uninterrupted power supply to operating theatre

Mid-term

- To develop optical urethrotomy, cystolitholapaxy and TURP
- To consider introduction of diagnostic laparoscopy
- To consider development of HDU

Long-term

- To develop ureteroscopy for lower ureteric stone and lithotripsy for renal calculi
- To extend a programme of postgraduate surgical training in Hawassa.

We were always made to feel very welcome by all the members of the college. Dr Aberra, in spite of his very busy workload made sure of all the local arrangements ran smoothly for us during the workshops, teaching sessions as well for the travel.

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